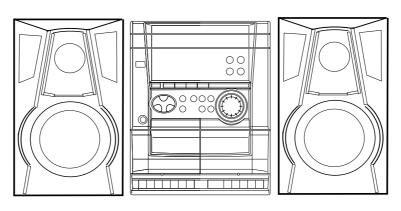


# NSX-AJ14 U NSX-BL14E HA NSX-BL14 HS, EZ, K NSX-BL16 EZ



# SERVICE MANUAL

COMPACT DISC STEREO CASSETTE RECEIVER

BASIC TAPE MECHANISM: ZZM-2 PR1NM BASIC CD MECHANISM: AZG-1 ZA3RNDM

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-AJ14 <u></u>	CX-NAJ14	SX-NAJ11	
NSX-BL14 <hs,ez,k> NSX-BL16<ez></ez></hs,ez,k>	CX-NBL14	SX-NBL11 SX-NBL16	RC-ZAS02
NSX-BL14E <ha></ha>	CX-NBL14E	SX-NBL17	

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" NSX-AJ14(U)/BL14E(HA)/BL14(HS,EZ,K)/BL16(EZ), (S/M Code No. 09-003-428-8T2).
- If requiring information about the CD mechanism, see Service Manual of AZG-1 (S/M Code No. 09-001-335-3NC).



# **SPECIFICATIONS**

<FM tuner section>

**Tuning range** 87.5 MHz to 108 MHz Usable sensitivity (IHF) U.HA.HS: 13.2 dBf

EZ,K: 16.8 dBf

Antenna terminals 75 ohms (unbalanced)

<AM/MW tuner section>

**Tuning range** 

530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)

 $350 \mu V/m$ **Usable sensitivity Antenna** Loop antenna

<LW tuner section><EZ,K>

**Tuning range** 144 kHz to 290 kHz Usable sensitivity  $1400 \mu V/m$ **Antenna** Loop antenna

<Amplifier section>

Power output Rated

U: 10 W + 10 W (50 Hz - 20 kHz, T.H.D. less than 1%, 6 ohms)

15 W + 15 W

(1 kHz, T.H.D. less than 10%, 6 ohms) HA: 28 W + 28 W (1 kHz, T.H.D. 1%,

6 ohms)

Reference: 35 W + 35 W (1 kHz, T.H.D. 10%, 6 ohms) HS: 17 W + 17 W (1 kHz, T.H.D. 1%,

6 ohms)

Reference: 20 W + 20 W (1 kHz, T.H.D. 10%, 6 ohms)

EZ,K: 12 W + 12 W (1 kHz/DIN 45500,

T.H.D. 1%, 6 ohms) Reference: 15 W + 15 W

(1 kHz/DIN 45324, T.H.D. 10%, 6 ohms) EZ:DIN MUSIC POWER: 30 W + 30 W U,EZ,K: 0.1% (6 W, 1 kHz, 6 ohms,

**Total harmonic distortion** 

DIN AUDIO) HA: 0.1% (14 W, 1 kHz, 6 ohms,

DIN AUDIO)

HS: 0.1% (8 W, 1 kHz, 6 ohms,

DIN AUDIO)

Inputs VIDEO/AUX: 500 mV

HS: MIC 1.8 mV(10 kohms)

**Outputs** SPEAKERS: accept speakers of 6

ohms or more

PHONES (stereo jack): accepts headphones of 32 ohms or more

<Cassette deck section>

**Track format** 4 tracks, 2 channels stereo

Frequency response 50 Hz - 8000 Hz Recording system AC bias

Deck 1: Recording/Playback head Heads

x 1, erase head x 1 Deck 2: Playback head x 1

<Compact disc player section>

Laser Semiconductor laser ( $\lambda = 780 \text{ nm}$ )

**D-A converter** 1 bit dual

Signal-to-noise ratio 85 dB (1 kHz, 0 dB) Harmonic distortion 0.05 % (1 kHz, 0 dB)

<Speaker system>SX-NAJ11<U>

Speaker System 2 way, bass reflex (magnetic

shielded type)

Speaker units Woofer:

120 mm (43/4 in.) cone type

Tweeter:

20 mm (13/16 in.) cone type

**Impedance** 6 ohms 87 dB/W/m Sensitivity Dimensions (W  $\times$  H  $\times$  D) 220 x 324 x 211 mm

 $(8^3/4 \times 12^7/8 \times 8^3/8 \text{ in.})$ 

2.0 kg (4 lbs 7 oz.) Weight

<Speaker system>SX-NBL17<HA>,SX-NBL11<HS,14EZ,K>,

SX-NBL16<16EZ>

Speaker System 2 way, bass reflex (magnetic shielded

> type) Woofer:

Speaker units 120 mm cone type

Tweeter: 20 mm cone type 6 ohms

Impedance Sensitivity 87 dB/W/m Dimensions (W  $\times$  H  $\times$  D) 220 x 324 x 211 mm

Weight 2.0 ka

<General>

Power requirements U: 120 V AC, 60 Hz

HA: 120 V/220-230 V/240 V AC (switchable), 50/60 Hz HS: 220 V AC, 60 Hz

EZ,K: 230 V AC, 50 Hz

Power consumption U: 38 W HA: 55 W

HS: 60 W EZ,K: 45 W

**Power consumption** U: With power-economizing

in standby mode mode off: 8 W

HA: With power-economizing

mode off: 12 W

HS,EZ,K: With power-economizing

mode off: 14 W

With power-economizing mode on:

0.9 W

Dimensions of main unit U,EZ,K:

 $(W \times H \times D)$ 

260 x 324 x 348 mm  $(10^{1}/4 \times 12^{7}/8 \times 13^{3}/4 \text{ in.})$ HA,HS: 260 x 324 x 348 mm

Weight of main unit U: 4.8 kg (10 lbs 9 oz.)

HA: 5.7 kg HS: 5.0 kg EZ,K: 4.9 kg

• Design and specifications are subject to change without notice.

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

### **WARNING!!**

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
  - Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

# **VAROITUS!**

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

#### **VARNING!**

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

### **CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### **ATTENTION**

L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

# **ADVARSEL**

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT

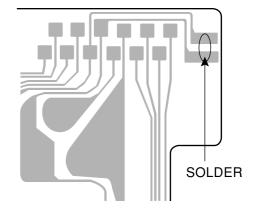
# Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

 After the connection, remove solder shown in right figure.

PICK-UP ASSY P.C.B



# NOTE ON BEFORE STARTING REPAIR

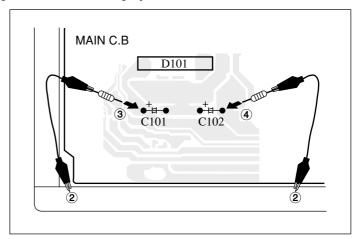
# 1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.

In order to prevent the secondary trouble, perform the following measures before starting repair work.

# Discharge procedure

- **1** Remove the AC power cord.
- 2 Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
- **3** Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
- ② Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
- Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.



Select a discharging resistor referring to the following table.

Fig-1

Charging voltage (V) (C101, 102)	Discharging resistor ( $\Omega$ )	Rated power (W)	Parts number		
25-48	100	3	87-A00-247-090		
49-140	220	5	87-A00-232-090		

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

# 2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

# 2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.

When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

# Good or no good judgement of the MICROCOMPUTER

- 1 Turn on the AC main power.
- ② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
- When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

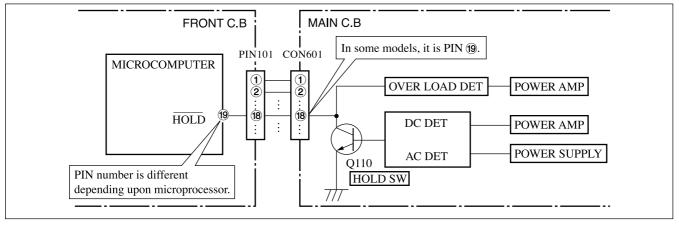


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

# 2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.

When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

**1** Remove the AC power cord.

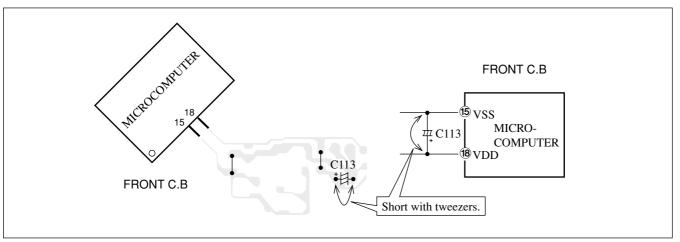


Fig-2-2

- ② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
- 3 Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

# 2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

# ELECTRICAL MAIN PARTS LIST

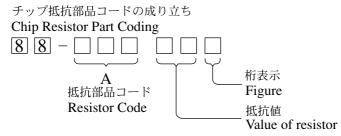
R	EF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			NO.		C21	87-016-495-000	-	E 3300-25 M SMG <ha,u></ha,u>
10					C21	87-A10-520-000		E 3300-35 M SMG <ez, hs="" k,=""></ez,>
		8A-NFA-616-010	C-IC,M3	8B59MFH-E251FP<16EZ>	C22	87-016-495-000		E 3300-25 M SMG <ha></ha>
		8A-NFA-615-010	C-IC,M3	8B57MCH-E236FP <except< td=""><td>C22</td><td>87-016-051-000</td><td></td><td>E 2200-35 SMG<ez,k,hs></ez,k,hs></td></except<>	C22	87-016-051-000		E 2200-35 SMG <ez,k,hs></ez,k,hs>
		87-A21-397-010		90-070 <ha></ha>	C22	87-A10-011-090	CAP,	E 2200-25 SMG <u></u>
		87-A21-419-040		M14558MD-TE2	COF	00 010 305 000	GA D	DI DOM OCO OCI III
		87-A21-443-040	C-IC,M6	2495AFP	C25 C25	87-010-385-080 87-010-406-080		ELECT 220-25V <ha> ELECT 22-50 M 11L SME<hs></hs></ha>
		87-A21-415-010	TC T.A18	43 <ez,k></ez,k>	C25	87-010-407-080		ELECT 33-50 M 11L SME <rz, k,="" u=""></rz,>
		87-A21-560-010		44L-A <except ez,k=""></except>	C26	87-010-247-080		ELECT 100-50V <ha></ha>
		87-070-127-110			C26	87-010-406-080		ELECT 22-50 <ez,k,hs,u></ez,k,hs,u>
		87-A21-629-010	•	442-10N				
		87-A21-482-010	IC,RPM6	938-H4	C30	87-010-247-080		ELECT 100-50V <ha></ha>
		07 700 440 010	C TC DII	1000EC 16E7	C30 C31	87-010-384-080		ELECT 100-25M11LSME <ez,k,hs,u> ELECT 100-10V</ez,k,hs,u>
		87-A20-440-010	C-1C, BU	1920FS<16EZ>	C32	87-010-263-080 87-010-197-080		CHIP 0.01 DM
					C33	87-010-263-080		ELECT 100-10V <u, ha=""></u,>
TRANS	SISTOR						•	·
					C34	87-010-247-080		ELECT 100-50V
		87-026-609-080			C35	87-010-406-080		ELECT 22-50
		89-213-702-010 87-026-610-080		370 (1.8W)	C36 C38	87-010-381-080		ELECT 330-16V
		87-A30-076-080			C38	87-A11-567-080 87-010-190-080		P,S 0.01-50 K B <except hs=""> P,S 0.01-50 ZF<hs></hs></except>
		87-A30-075-080			C30	07 010 130 000	C CA	1,5 0.01 30 21(115)
			, .		C50	87-010-384-080	CAP,	ELECT 100-25 M 11L SME <u></u>
		87-A30-255-010	C-TR,2S	B1342 <u></u>	C60	87-010-403-080	CAP,	ELECT 3.3-50V
		87-A30-256-010			C97	87-010-196-080		CAPACITOR, 0.1-25 <ha></ha>
		87-A30-190-080			C100	87-018-127-080		TC-U 470P
		87-026-245-080 87-A30-198-080		14ES <hs,ha> 199GR<hs,ha></hs,ha></hs,ha>	C101	87-010-183-080	C-CA.	P,S 2700P-50 B <ha></ha>
		07-A30-130-000	IR, RICS	199GK <n5,na></n5,na>	C101	87-010-185-080	C-CA	P,S 3900P-50 KB <ez,k,hs,u></ez,k,hs,u>
		87-A30-090-080	FET, 2SK	2541	C102	87-010-183-080		P,S 2700P-50 B <ha></ha>
		87-A30-484-080		A102S	C102	87-010-185-080		P,S 3900P-50 KB <ez,k,hs,u></ez,k,hs,u>
		87-A30-468-080		C102S-RTK	C103	87-010-545-080		ELECT 0.22-50V
		87-A30-107-070			C104	87-010-545-080	CAP,	ELECT 0.22-50V
		87-A30-106-040	C-TR,CM	B15551	C105	87-010-178-080	СПТР	CAP 1000P <ha></ha>
		87-A30-091-080	FET,2SJ	460	C105	87-010-176-080		CHIP 4700P <ez,k,hs,u></ez,k,hs,u>
		87-A30-062-080			C106	87-010-178-080		CAP 1000P <ha></ha>
		87-A30-318-080	TR,CSA9	52K	C106	87-010-186-080	CAP,	CHIP 4700P <ez,k,hs,u></ez,k,hs,u>
		89-333-317-880		331 (0.5W)	C107	87-010-404-080	CAP,	ELECT 4.7-50V <ha></ha>
		87-A30-234-080	TR,CSC4	115BC	G1 0 7	07 010 402 000	CI VD	DI DOM 2 2 FAM. DE WING II.
		89-327-143-080	TD 29C2	714 (0.1W)	C107 C108	87-010-403-080 87-010-404-080		ELECT 3.3-50V <ez,k,hs,u> ELECT 4.7-50V<ha></ha></ez,k,hs,u>
		87-A30-489-080			C108	87-010-403-080		ELECT 3.3-50V <ez,k,hs,u></ez,k,hs,u>
		89-503-602-080		SK360E <ez,k></ez,k>	C109	87-010-322-080		P, S 100P-50JCH <ez,k></ez,k>
		87-A30-086-070		D1306E <ez,k></ez,k>	C109	87-010-179-080	C-CA	P, S 1200P-50KB <ha></ha>
		87-A30-495-080	TR,2SA1	981Y				
					C110 C110	87-010-322-080 87-010-179-080		P, S 100P-50JCH <ez,k> P, S 1200P-50KB<ha></ha></ez,k>
DIODE	R				C111	87-010-179-080		E 10-35 SME <ha></ha>
DIODI	_				C111	87-010-406-080		ELECT 22-50 <ez,k,hs,u></ez,k,hs,u>
		87-A40-736-080	DIODE, 1	N4148M (SEM)	C112	87-010-391-080		E 10-35 SME <ha></ha>
		87-020-465-080		SS133 (110MA)				
		87-A40-455-080	•	L203 GW	C112	87-010-406-080		ELECT 22-50 <ez,k,hs,u></ez,k,hs,u>
		87-A40-553-080		N4003 LES	C113	87-010-405-080 87-012-156-080		ELECT 10-50V <ha></ha>
		87-A40-774-080	ZENEK, U	חהבחהח	C113 C113	87-012-156-080 87-A10-946-080		P, S 220P-50 J CH <ez,k,u> P, S 220P-100 J CH<hs></hs></ez,k,u>
		87-A40-764-080	ZENER, U	Z10BSC	C114	87-010-405-080		ELECT 10-50V <ha></ha>
		87-A40-313-080	C-DIODE	,MC 2840 <ha></ha>				
		87-A40-270-080			C114	87-012-156-080		P, S 220P-50 J CH <ez,k,u></ez,k,u>
		87-A40-269-080			C114	87-A10-946-080		P, S 220P-100 J CH <hs></hs>
		87-A40-768-080	ZENEK, U	Z16BSA <ha></ha>	C119 C120	87-010-197-080 87-010-197-080		CHIP 0.01 DM CHIP 0.01 DM
		87-A40-752-080	ZENER.U	Z6.2BSC	C123	87-010-137-080		CHIP 0.01 DM EZ, K>
		87-A40-739-080		Z2.7BSA			/	
		87-017-149-080	ZENER, H	ZS6A2L	C124	87-010-197-080	CAP,	CHIP 0.01 DM <ez,k></ez,k>
		87-A40-535-080	DIODE,1	N5393-GOODARK <u></u>	C125	87-012-368-080		P,S 0.1-50 F <ha></ha>
					C125	87-010-196-080		CAPACITOR, 0.1-25 <ez, hs,="" k,="" u=""></ez,>
MAIN	CB				C126 C126	87-012-368-080 87-010-196-080		P,S 0.1-50 F <ha> CAPACITOR,0.1-25<ez,k,hs,u></ez,k,hs,u></ha>
	٠.٥				2220	010 100 000	CHIL	
C3		87-010-196-080	CHIP CA	PACITOR, 0.1-25 <ha></ha>	C127	87-012-368-080	C-CA	P,S 0.1-50 F <ha></ha>
C4		87-010-196-080		PACITOR, 0.1-25 <ha></ha>	C127	87-010-196-080		CAPACITOR, 0.1-25 <ez, hs,="" k,="" u=""></ez,>
C5		87-010-196-080		PACITOR, 0.1-25 <ha></ha>	C128	87-012-368-080		P,S 0.1-50 F <ha></ha>
C6 C9		87-010-196-080 87-010-196-080		PACITOR, 0.1-25 <ha> PACITOR, 0.1-25</ha>	C128 C129	87-010-196-080 87-A11-572-080		CAPACITOR, 0.1-25 <ez, hs,="" k,="" u=""> P,S 0.015-50 K B<ha></ha></ez,>
C9		0.1-010-130-080	CHIP CA	.FACIIUR, U.1-25	C123	01-WTT-2/7-080	C-CA.	E,5 U.UI3-3U K D <na></na>
C10		87-010-196-080	CHIP CA	PACITOR, 0.1-25	C130	87-A11-572-080	C-CA	P,S 0.015-50 K B <ha></ha>
C11		87-010-196-080	CHIP CA	PACITOR, 0.1-25	C131	87-010-197-080	CAP,	CHIP 0.01 DM <ha></ha>
C12		87-010-196-080		PACITOR, 0.1-25	C132	87-010-197-080		CHIP 0.01 DM <ha></ha>
C19		87-A10-627-000		200-50 M SMG <ha></ha>	C133	87-010-186-080		CHIP 4700P
C20		87-A10-627-000	CAP,E 2	200-50 M SMG <ha></ha>	C140	87-010-182-080	C-CA.	P,S 2200P-50 B

REF. NO	. PART NO.	KANRI NO.	DESCRIPTION	REF. NO	. PART NO.	Kanri No.	DESCRIPTION
C183 C184 C185 C200	87-010-387-080 87-010-403-080 87-018-209-080 87-018-195-080	CAP,E 4' CAP, ELI CAP, TC CAP TC-1		C772	87-010-322-080 87-010-197-080 87-010-263-080 87-010-197-080	C-CAP CAP, CAP, CAP,	P,S 100P-50 CH <ez,k,ha> CHIP 0.01 DM ELECT 100-10V CHIP 0.01 DM</ez,k,ha>
C300 C301 C302 C303 C304 C305	87-018-195-080 87-010-179-080 87-010-179-080 87-010-178-080 87-010-178-080 87-010-198-080		P S B1200P P S B1200P P 1000P P 1000P IP 0.022	C779 C780 C782 C783 C784 C785	87-010-971-080 87-010-971-080 87-010-197-080 87-010-197-080 87-010-197-080 87-010-197-080	CAP, CAP, CAP,	CHIP 4700P-50JB <ez,k>  CHIP 4700P-50JB<ez,k>  CHIP 0.01 DM  CHIP 0.01 DM  CHIP 0.01 DM  CHIP 0.01 DM</ez,k></ez,k>
C307 C308 C309 C309 C310	87-010-263-080 87-010-263-080 87-010-311-080 87-010-318-080 87-010-314-080	CAP, ELI CAP, ELI C-CAP, S C-CAP, S C-CAP, S	ECT 100-10V ECT 100-10V S 12P-50J CH <ez,k> S 47P-50J CH<hs,u> S 22P-50J CH<ez,k></ez,k></hs,u></ez,k>	C786 C788 C789 C789 C789	87-010-197-080 87-010-149-080 87-A12-052-080 87-A11-532-080 87-A10-801-080	C-CAF C-CAF	CHIP 0.01 DM P,S 5P-50 CH P,S 0.033-25 J B <u,ha> P,S 0.022-50 J B<ez,k> P,S 0.022-16 J B<hs></hs></ez,k></u,ha>
C310 C311 C312 C313 C314	87-010-318-080 87-010-598-080 87-010-598-080 87-010-188-080 87-010-188-080	C-CAP, S C-CAP,S C-CAP,CHI CAP,CHI	3 47P-50J CH <hs,u> 0.068-16VRK 0.068-16VRK P 6800P</hs,u>	C790 C790 C790 C791 C792	87-A12-052-080 87-A11-532-080 87-A10-801-080 87-010-196-080 87-010-197-080	C-CAE C-CAE CHIP	P,S 0.033-25 J B <u,ha> P,S 0.022-50 J B<ez,k> P,S 0.022-16 J B<hs> CAPACITOR,0.1-25 CHIP 0.01 DM</hs></ez,k></u,ha>
C315 C317 C318 C320 C321	87-010-263-080 87-010-546-080 87-010-546-080 87-010-196-080 87-010-196-080	CAP, ELI CAP, ELI CAP, ELI CHIP CAI	ECT 100-10V ECT 0.33-50V ECT 0.33-50V PACITOR,0.1-25 <ez,k> PACITOR,0.1-25<ez,k></ez,k></ez,k>	C793 C794 C795 C796 C797	87-010-404-080 87-010-322-080 87-010-197-080 87-010-197-080 87-010-405-080	CAP, CAP, CAP,	ELECT 4.7-50V CHIP 100P-50J CH <ez,k> CHIP 0.01 DM CHIP 0.01 DM ELECT 10-50V</ez,k>
C324 C325 C326 C327 C350	87-010-196-080 87-010-196-080 87-010-198-080 87-010-196-080 87-010-196-080	CHIP CAL CAP, CHI CHIP CAL	PACITOR, 0.1-25 <ez, k=""> PACITOR, 0.1-25<ez, k=""> IP 0.022 PACITOR, 0.1-25 PACITOR, 0.1-25<ez, k=""></ez,></ez,></ez,>	C798 C799 C800 C801 C802	87-010-197-080 87-010-407-080 87-012-369-080 87-010-403-080 87-012-369-080	CAP, C-CAP CAP,	CHIP 0.01 DM ELECT 33-50V ,S 0.047-50F ELECT 3.3-50V P,S 0.047-50F
C360 C363 C399 C401 C402	87-010-401-080 87-010-197-080 87-012-140-080 87-010-544-080 87-010-544-080	CAP, ELI CAP, CHI CAP 4701 CAP, ELI CAP, ELI	BCT 1-50V IP 0.01 DM <ez,k> P BCT 0.1-50V BCT 0.1-50V</ez,k>	C803 C804 C807 C808 C809	87-010-198-080 87-010-263-080 87-010-400-080 87-010-401-080 87-010-401-080	CAP, CAP, CAP,	CHIP 0.022 ELECT 100-10V ELECT 0.47-50V ELECT 1-50V ELECT 1-50V
C405 C406 C407 C408 C409	87-010-197-080 87-010-197-080 87-010-197-080 87-010-197-080 87-010-182-080	CAP, CH CAP, CH CAP, CH	IP 0.01 DM IP 0.01 DM IP 0.01 DM IP 0.01 DM 2200P-50 B	C810 C814 C815 C815 C816	87-010-196-080 87-010-197-080 87-010-400-080 87-010-403-080 87-010-400-080	CAP, CAP, CAP,	CAPACITOR, 0.1-25 CHIP 0.01 DM ELECT 0.47-50V <hs> ELECT 3.3-50V<except hs=""> ELECT 0.47-50V<hs></hs></except></hs>
C410 C411 C412 C452 C453	87-010-182-080 87-010-405-080 87-010-405-080 87-010-382-080 87-010-183-080	CAP, ELI	2200P-50 B GCT 10-50V GCT 10-50V GCT 22-25V 2700P-50 B	C816 C818 C821 C823 C823	87-010-403-080 87-010-180-080 87-010-405-080 87-010-177-080 87-012-349-080	CAP, CAP, C-CAE	ELECT 3.3-50V <except hs=""> CHIP 1500P-50 KB<ez,k> ELECT 10-50V P,S 820P-50 SL<ha,hs,u> P,S 1000P-50 J CH<ez,k></ez,k></ha,hs,u></ez,k></except>
C454 C455 C456 C458 C459	87-010-183-080 87-010-183-080 87-010-197-080 87-010-178-080 87-010-175-080	C-CAP,S	2700P-50 B 2700P-50 B IP 0.01 DM IP 1000P-50KB <ez,k> IP 560P-50J SL<ez,k></ez,k></ez,k>	C824 C825 C831 C842 C844	87-010-405-080 87-010-596-080 87-010-406-080 87-010-197-080 87-010-197-080	CAP, CAP, CAP,	ELECT 10-50V S 0.047-16 E 22-50 M 11L <ez,k> CHIP 0.01 DM CHIP 0.01 DM</ez,k>
C460 C461 C462 C470 C605	87-010-196-080 87-012-158-080 87-012-158-080 87-018-127-080 87-010-179-080	C-CAP,S C-CAP,S CAP, TC	PACITOR, 0.1-25 390P-50 CH 390P-50 CH U 470P-50 BK <u> P S B1200P</u>	C851 C852 C853 C858 C859	87-010-197-080 87-010-197-080 87-010-197-080 87-010-196-080 87-010-196-080	CAP, CAP, CHIP	CHIP 0.01 DM CHIP 0.01 DM CHIP 0.01 DM CAPACITOR, 0.1-25 CAPACITOR, 0.1-25
C606 C609 C610 C611 C612	87-010-179-080 87-010-213-080 87-010-213-080 87-010-545-080 87-010-545-080	CAP, CHI C-CAP, S C-CAP, S CAP, ELI CAP, ELI	P S B1200P 0.015-50 B 0.015-50 B BCT 0.22-50V BCT 0.22-50V	C860 C869 C871 C872 C873	87-010-197-080 87-010-197-080 87-012-156-080 87-012-156-080 87-012-140-080	CAP, CAP, CAP,	CHIP 0.01 DM CHIP 0.01 DM<16EZ> CHIP S 220P-50 JCH<16EZ> CHIP S 220P-50 JCH<16EZ> CHIP S 470P-50 JCH<16EZ>
C613 C614 C615 C616	87-010-545-080 87-010-545-080 87-010-154-080 87-010-385-080 87-010-248-080	CAP, ELI CAP, ELI CAP CHII	ECT 0.22-50V ECT 0.22-50V P 10P ECT 220-25V <ha></ha>	C874 C875 C876 C877 C878	87-010-405-080 87-010-196-080 87-010-405-080 87-012-156-080 87-010-316-080	CAP, CAP, CAP,	ELECT 10-50V<16EZ> CHIP S 0.1-25 FZ<16EZ> ELECT 10-50V<16EZ> CHIP S 220P-50 JCH<16EZ> CHIP S 33P-50 JCH<16EZ>
C617 C617 C618 C630 C669	87-010-385-080 87-010-248-080 87-010-405-080 87-016-669-080 87-010-322-080	CAP, ELI CAP, ELI C-CAP,S	ECT 220-10 <ez,k,hs,u> ECT 10-50V</ez,k,hs,u>	C879 C940 C942 C947 C948	87-010-314-080 87-010-197-080 87-010-149-080 87-010-197-080 87-012-140-080	CAP, CAP, CAP,	CHIP S 22P-50 JCH<16EZ> CHIP S 0.01-25 KB <ez,k> CHIP S 5P-50 CH<ez,k> CHIP S 0.01-25 KB<ez,k> CHIP S 470P-50 JCH<ez,k></ez,k></ez,k></ez,k></ez,k>

REF. NC	. PART NO.	KANRI DESCRIPTION		REF. NO.		KANRI	DESCRIPTION
C952	87-010-197-080	NO. CAP, CHIP S 0.01-2	25 KB <ez,k> F</ez,k>	RONT C.B		NO.	
C957	87-010-311-080	CAP, CHIP S 12P-50	25 KB <ez,k> F ) JCH<ez,k> 25 KB<ez,k></ez,k></ez,k></ez,k>				
C958	87-010-197-080	CAP, CHIP S 0.01-2	25 KB <ez,k></ez,k>	C101	87-010-196-080		PACITOR, 0.1-25
C959 C960	87-010-196-080 87-010-196-080	CHIP CAPACITOR, 0.1 CHIP CAPACITOR, 0.1		C102 C103	87-012-369-080 87-010-374-040		0.047-50F ECT 47-10
0300	07 010 130 000			C104	87-A10-797-040		7-35 M 5L SRM
C961	87-010-152-080			C105	87-010-192-080	C-CAP,S	0.022-50 F
C962 C963	87-010-401-080 87-015-785-080	CAP, ELECT 1-50V <e< td=""><td>ZZ,K&gt;</td><td>C1 0.7</td><td>87-010-196-080</td><td>משדה מא</td><td>PACITOR, 0.1-25</td></e<>	ZZ,K>	C1 0.7	87-010-196-080	משדה מא	PACITOR, 0.1-25
C971	87-010-381-080	CAP, ELECT 330-16V	1	C107	87-010-138-080		P 1000P
C972	87-010-404-080	CAP, ELECT 4.7-50V	22,K> 1FZ-25Z /	C109	87-012-369-080		0.047-50F
C973	87-010-197-080	CAP, CHIP 0.01 DM		C110 C111	87-010-197-080 87-010-196-080		IP 0.01 DM PACITOR,0.1-25
C974	87-010-197-080	CAP, CHIP 0.01 DM			07-010-150-000	CHIT CA	FACITOR, 0.1-25
C979	87-010-322-080	C-CAP,S 100P-50 CH	I 25	C113	87-010-178-080		P 1000P
C982 C983	87-010-196-080 87-010-197-080	CHIP CAPACITOR, 0.1 CAP, CHIP 0.01 DM	1-25	C114	87-010-154-080 87-010-175-080	CAP CHI CAP 560	
C505	07 010 137 000	CAI, CHII U.UI DH		C116	87-010-400-040	CAP,E 0	
C984	87-010-197-080	CAP, CHIP 0.01 DM		C117	87-016-460-080	C-CAP,S	0.22-16 B
C985 C987	87-010-322-080 87-010-197-080	CAP, CHIP 100P-50J CAP, CHIP 0.01 DM		C118	87-A10-189-040	CAP,E 2	20-10
C989	87-010-197-080	CAP, CHIP 0.01 DM <	EZ,K>	C119	87-A10-189-040	CAP,E 2	
C993	87-010-178-080	CAP, CHIP 0.01 DM< CHIP CAP 1000P		C120	87-012-156-080		220P-50 CH
C995	87-010-178-080	CHIP CAP 1000P		C123 C124	87-010-196-080 87-010-196-080		PACITOR, 0.1-25 PACITOR, 0.1-25
C997	87-010-176-080	CHIP CAPACITOR, 0.1		CIZT	07-010-150-000	CHIT CA	FACITOR, 0.1-25
C999	87-A11-155-080	CAP,TC U 0.01-16 Z	Z F	C125	87-010-405-040	CAP,E 1	
CF831	87-008-261-010			C126	87-010-196-080		PACITOR, 0.1-25
CF831	87-008-423-010	FILTER, CF SFE10.7		C129 C210	87-010-374-040 87-012-156-080	CAP,E 4 C-CAP,S	220P-50 CH
CF832	87-008-261-010		5-A <except ez,k=""></except>	C212	87-010-404-040		.7-50 SME
CF832	82-785-747-010	CF, MS2 GHY, R <ez, k=""></ez,>		G013	05 010 404 040	G3.D. E. 4	E SO CHE
CN301 CN351	87-A60-620-010 87-A60-625-010	CONN, 3P V 2MM JMT CONN, 8P V 2MM JMT		C213 C401	87-010-404-040 87-010-186-080		.7-50 SME 4700P-50 K B <hs></hs>
CN601	87-099-719-010	CONN, 30P TYK-B(X)		C402	87-010-060-040		00-16 M 7L SRA <hs></hs>
CINIC O O	07 000 104 010	CONN. CD. CO.1CU		C403	87-010-545-040		.22-50 M 11L SME <hs></hs>
CN602 CNA1	87-099-194-010 8A-NF8-652-010	CONN, 6P 6216V CONN ASSY, 7P TID-A		C404	87-010-322-040	C-CAP, S	100P-50 J CH GRM <hs></hs>
CNA1	8A-NF8-653-010	CONN ASSY, 9P TID-A	A(480) <ha></ha>	C405	87-010-545-040		.22-50 M 11L SME <hs></hs>
FFE831	A8-8ZA-190-030	8ZA-1 FEUNM <except< td=""><td></td><td></td><td>87-016-669-080</td><td></td><td>0.1-25 K B<hs></hs></td></except<>			87-016-669-080		0.1-25 K B <hs></hs>
FFE831	A8-6ZA-191-130	6ZA-1 FEENM <ez,k></ez,k>		C407 C408	87-010-405-040 87-010-322-040		0-50 M 11L SME <hs> 100P-50 J CH GRM<hs></hs></hs>
J101	87-A60-602-010	JACK, DIA6.3 BLK ST	W/SW TC	C409	87-010-378-040		0-16 M 11L SME <hs></hs>
J203	87-A60-238-010	TERMINAL, SP 4P (MS	SC) <ha></ha>	C410	07 010 106 000	C C	0 1 25 7 12 110
J602 J831	87-A60-881-010 87-A60-202-010	TERMINAL, ANT 4P MS		C410 C412	87-010-196-080 87-010-177-080		0.1-25 Z F <hs> 820P-50 J SL<hs></hs></hs>
J832	87-A60-403-010	TERMINAL, ANT PAL 2	P HSP312V05 <ez,k></ez,k>	C701	87-010-384-040	CAP,E 1	00-25 SME
L101	87-003-383-010	COIL, 1UH-S <except< td=""><td></td><td>C702 CN101</td><td>87-010-178-080 87-099-720-010</td><td></td><td>1000P-50KB<ez,k> P TYK-B(P)</ez,k></td></except<>		C702 CN101	87-010-178-080 87-099-720-010		1000P-50KB <ez,k> P TYK-B(P)</ez,k>
L101	87-A50-610-010	COIL, 1UH-K (MDEC) <u< td=""><td></td><td>CNIUI</td><td>87-033-720-010</td><td>COININ, 30</td><td>r IIK-B(r)</td></u<>		CNIUI	87-033-720-010	COININ, 30	r IIK-B(r)
L102	87-003-383-010	COIL, 1UH-S <except< td=""><td></td><td></td><td>87-A60-673-010</td><td></td><td></td></except<>			87-A60-673-010		
L102 L451	87-A50-610-010 87-007-342-010	COIL, 1UH-K (MDEC) <u COIL, OSC 85K BIAS</u 		CN801 EMI401	87-099-015-010 87-008-372-080		P 6216V II BL01 RN1 <hs></hs>
пал	07-007-342-010	COID, OSC OSK BIAS		FL201	8A-NFA-604-010		T-224GNK
L801	87-A50-540-010	COIL, FM DET (TOK)		J404	87-A61-242-010	JACK,6.	3 BLK MONO W/SW VKM <hs></hs>
L801 L802	87-A50-608-010 87-A91-551-010	COIL, FM DET-N (TOK FLTR, PCFJZH-450 L(		L101	87-A50-434-010	COTT. CT.	K 4.19M(TOKO)
L811	87-005-847-080	COIL, 2.2UH (CECS)		LED101	87-A40-317-080		-342VCT31 RED
L832	87-005-847-080	COIL, 2.2UH (CECS)		S101	87-A91-555-010		EC12E24504
L861	87-005-847-080	COIL, 2.2UH(CECS)<1		S301 S302	87-A90-164-080 87-A90-164-080		SKQAB (N) SKQAB (N)
L941	87-A50-020-010	COIL, ANT LWCOI <ez,< td=""><td></td><td>5502</td><td>0. 150 101 000</td><td>5, 11101</td><td>Ditgill (II)</td></ez,<>		5502	0. 150 101 000	5, 11101	Ditgill (II)
L942	87-A50-019-010	COIL, OSC LWCOI <ez,< td=""><td></td><td>S303</td><td>87-A90-164-080</td><td></td><td>SKQAB(N)</td></ez,<>		S303	87-A90-164-080		SKQAB(N)
L951 L951	8A-NF8-667-010 8A-NF8-668-010	COIL, AM PACK 4 (TOK COIL, AM PACK 2 (TOK		S304 S305	87-A90-164-080 87-A90-164-080		'SKQAB (N) 'SKQAB (N)
2552	011 111 0 000 010	0012/111 111011 2 (101		S306	87-A90-164-080		SKQAB(N)
R131	87-A00-258-080	RES,M/F 0.22-1W J<		S307	87-A90-164-080	SW, TACT	SKQAB(N)
R132 R653	87-A00-258-080 87-A11-144-080	RES,M/F 0.22-1W J< CAP,TC U 0.1-50 K	R>HA>	S308	87-A90-164-080	SW.TACT	SKQAB(N)
R654	87-A11-144-080	CAP, TC U 0.1-50 K	B <ha></ha>	S309	87-A90-164-080		SKQAB(N)
R790	87-010-197-080	CAP, CHIP 0.01 DM		S310	87-A90-164-080		' SKQAB(N)<16EZ>
R991	87-010-322-080	C-CAP,S 100P-50 CH		S311 S312	87-A90-164-080 87-A90-164-080		' SKQAB(N)<16EZ> ' SKQAB(N)<16EZ>
R993	87-010-322-080	C-CAP,S 100P-50 CH	I				
R995	87-010-322-080	C-CAP,S 100P-50 CH		S321	87-A90-164-080		SKQAB(N)
TC942 W181	87-011-253-080 85-NF5-628-010	TRIMMER, CER 30P 4. F-CABLE, 7P 2.5 <ez,< td=""><td></td><td>S322 S323</td><td>87-A90-164-080 87-A90-164-080</td><td></td><td>'SKQAB (N) 'SKQAB (N)</td></ez,<>		S322 S323	87-A90-164-080 87-A90-164-080		'SKQAB (N) 'SKQAB (N)
	33 1.13 020 010		•	S324	87-A90-164-080	SW, TACT	SKQAB(N)
WH1	87-A90-510-010			S325	87-A90-164-080	SW,TACT	SKQAB(N)
WH1 X861	87-A90-460-010 87-A70-091-010	HLDR, WIRE 2.5-7P <e VIB, XTAL 4.332MHZ</e 		S326	87-A90-164-080	SW.TACT	SKQAB(N)
X991	87-A70-061-010	VIB,XTAL 4.500MHZ	CSA-309	S327	87-A90-164-080	SW, TACT	SKQAB(N)
				S328	87-A90-164-080	SW, TACT	SKQAB(N)

	REF. NO.	PART NO.	KAN NO.		DESCRIPTION
	S330 S331 SFR701	87-A90-164-080 87-A90-164-080 87-A90-164-080 87-024-431-080 87-NB7-602-010		SW, TACT SW, TACT SW, TACT SFR, 3.3K	SKQAB(N)
1	PT C.B				
	C31 C183 C184	87-010-387-080 87-010-403-080 87-010-387-080 87-010-403-080 87-018-209-080		CAP, ELE CAP, ELE CAP, ELE	0-25 SME <ha,hs> CT 3.3-50V<ha,hs> CT 470-25 M<u,ez,k> CT 3.3-50V<u,ez,k> U 0.1-50 ZF<ez,k></ez,k></u,ez,k></u,ez,k></ha,hs></ha,hs>
<u>^</u>	CN1 PT1 PT1	87-A61-110-010 87-A61-109-010 8A-NFA-606-010 8A-NFA-608-010 8A-NFA-609-010		CONN, 7P PT, ANF-A	EZ <ez,k></ez,k>
	PT2 PT181 PT181	8A-NFZ-610-010 8A-NF8-673-010 8A-NF8-661-010 8A-NF8-662-010 87-A91-281-010		PT, SUB A	U30 <u> NF-8 (H)KAMI<ha,hs> NF-8 (U)<u> NF-8 (E)<ez,k> DC12V OSA-SS-212DM5<ha,hs></ha,hs></ez,k></u></ha,hs></u>
	S1 T1 T2	87-A90-976-010 87-A90-165-010 87-A60-317-010 87-A60-317-010 87-A60-317-010		SW,SL 1- TERMINAL TERMINAL	12V SDT-S-112LMR <u,ez,k> 2-3 SWS2301-HA&gt; , 1P MSC<ha,hs> , 1P MSC<ha,hs> , 1P MSC<u,ez,k></u,ez,k></ha,hs></ha,hs></u,ez,k>
$\triangle$	T182 WH181	87-A60-317-010 87-A90-460-010			, 1P MSC <u,ez,k> E 2.5-7P<u,ez,k></u,ez,k></u,ez,k>

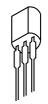
# 〇チップ抵抗部品コード/CHIP RESISTOR PART CODE



# チップ抵抗 Chip resistor

容量	種類	許容誤差	記号	寸法/Dime	ensions (	(mm)		抵抗コード : A
Wattage	Type	Tolerance	Symbol	外形/Form	L	W	t	Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ	L J t	1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ	r	3.2	1.6	0.55	128

# TRANSISTOR ILLUSTRATION



E C B

CSA952 CSC4115 KTA1266 KTC3198 KTC3199



S D G

2SJ460 2SK2541



ЕСВ

DTC114ES



RCF

2SB1342 2SB1370 2SD1933



ВСЕ

2SC3331



ЕВС

2SA1981



ЕСВ

CC5551

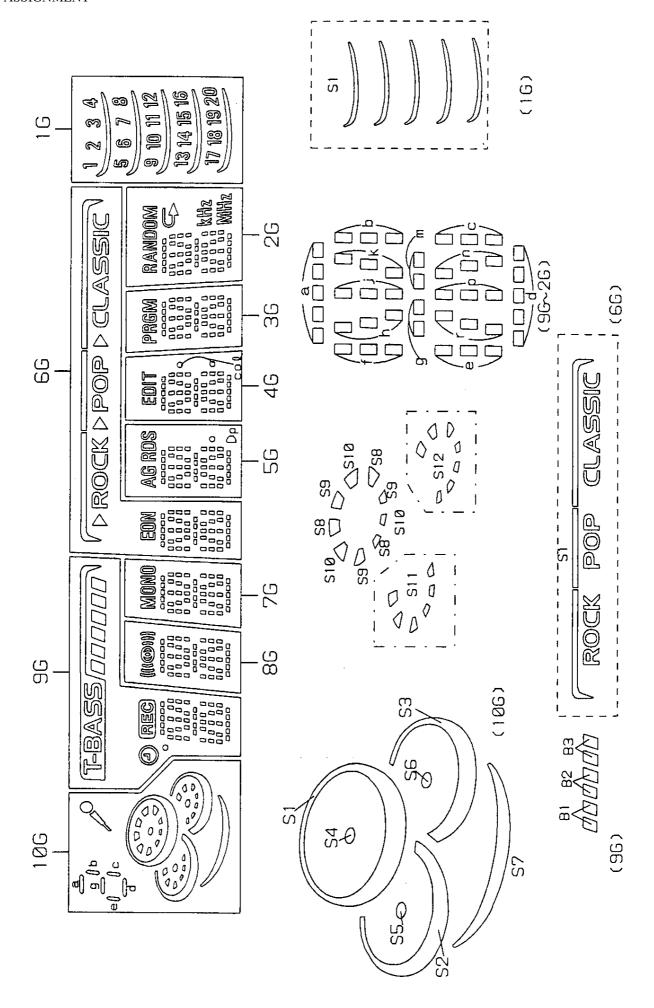


2SK360

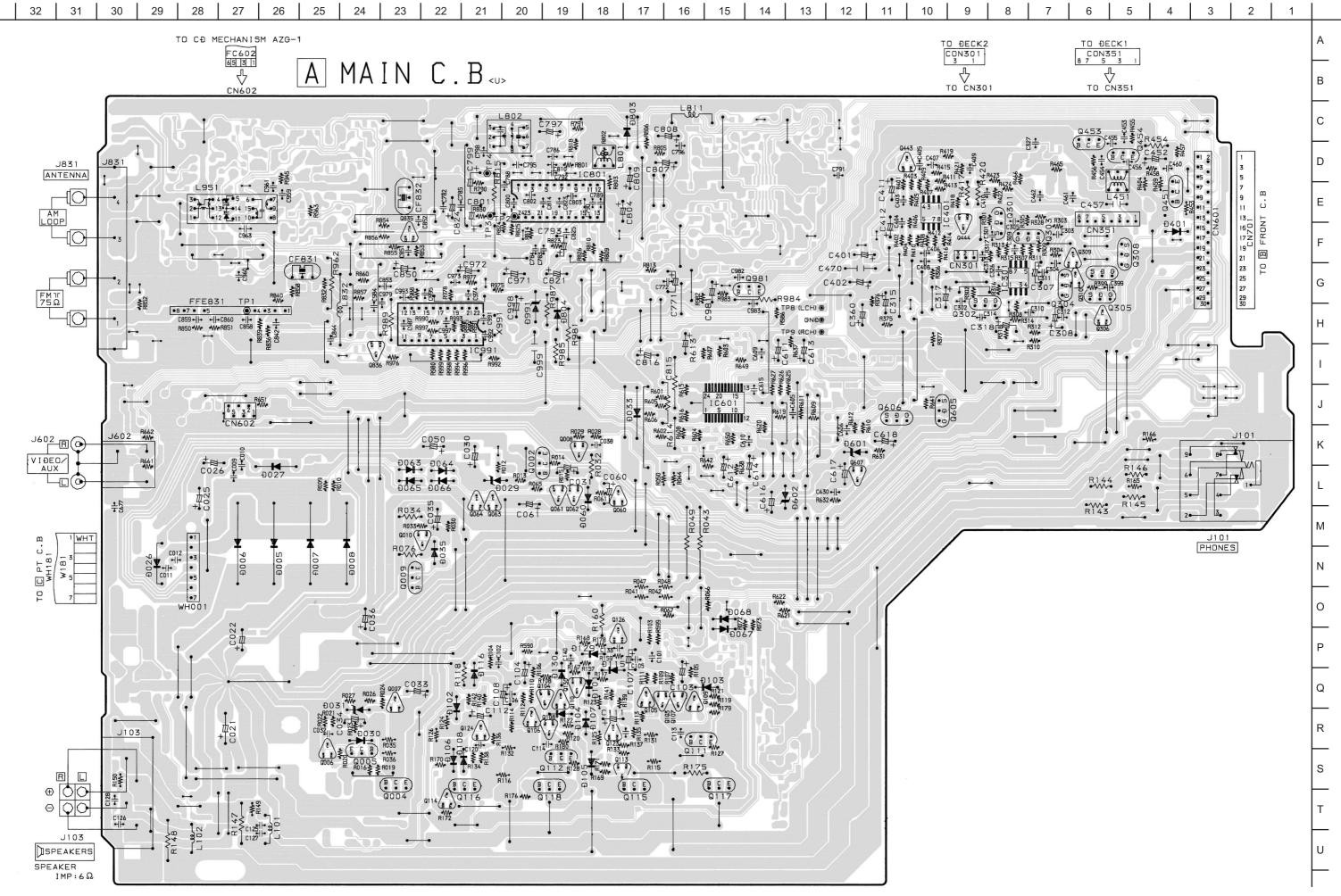


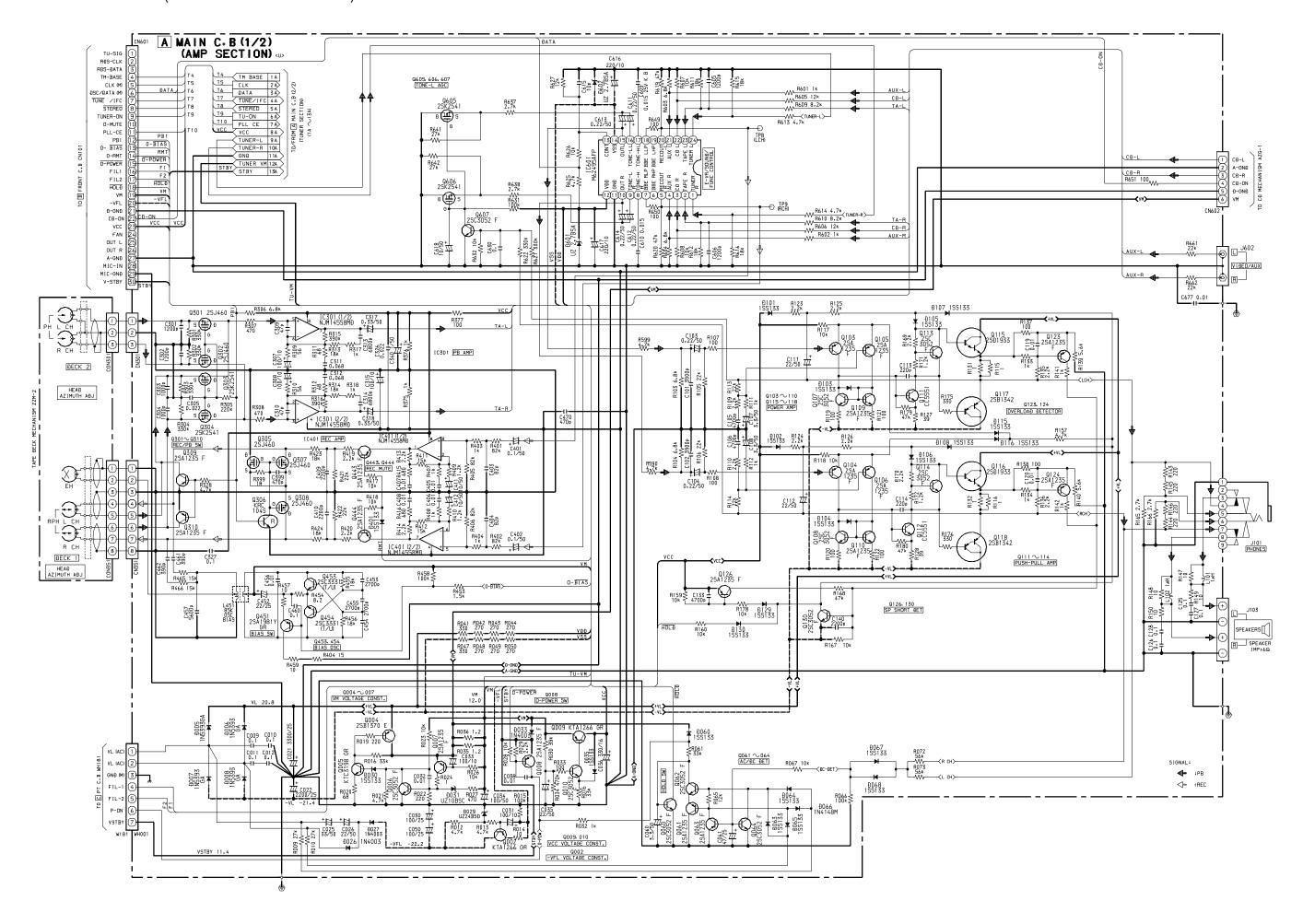
2SA1235 CMBT5551 2SC2714 KRA102 2SC3052 KRA107

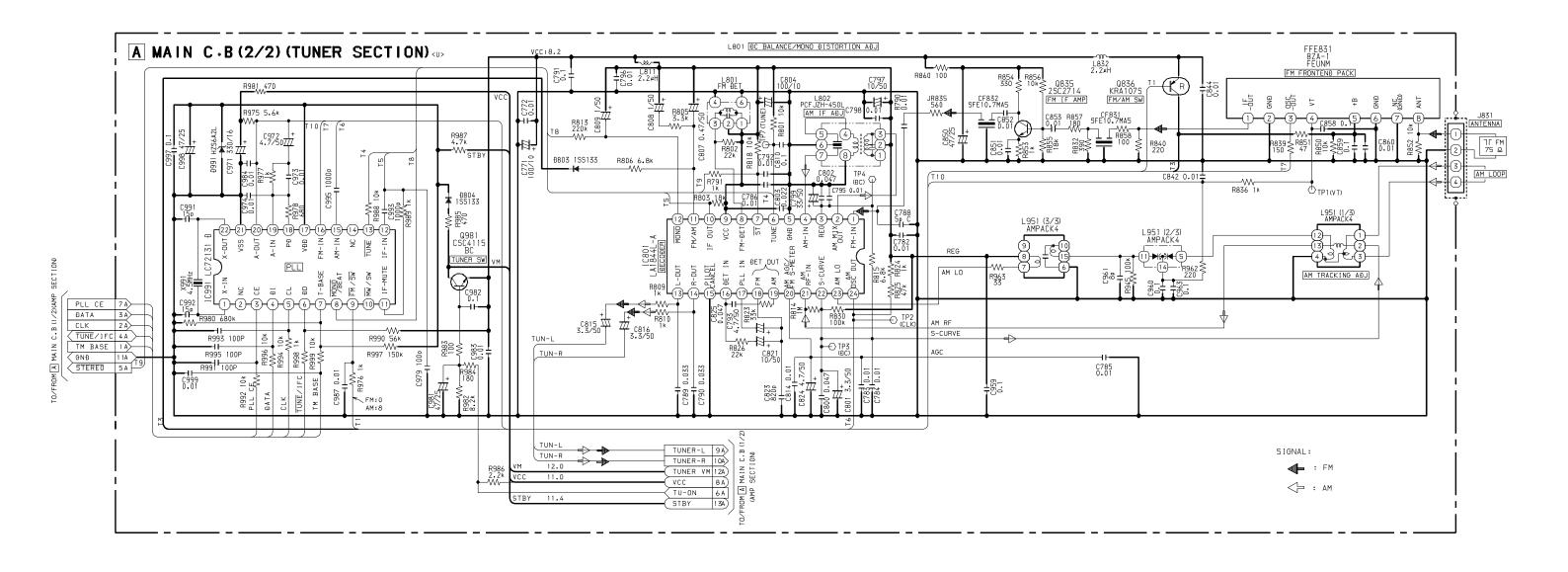
CSD1306 KRC102 CMBT5401 KRC104

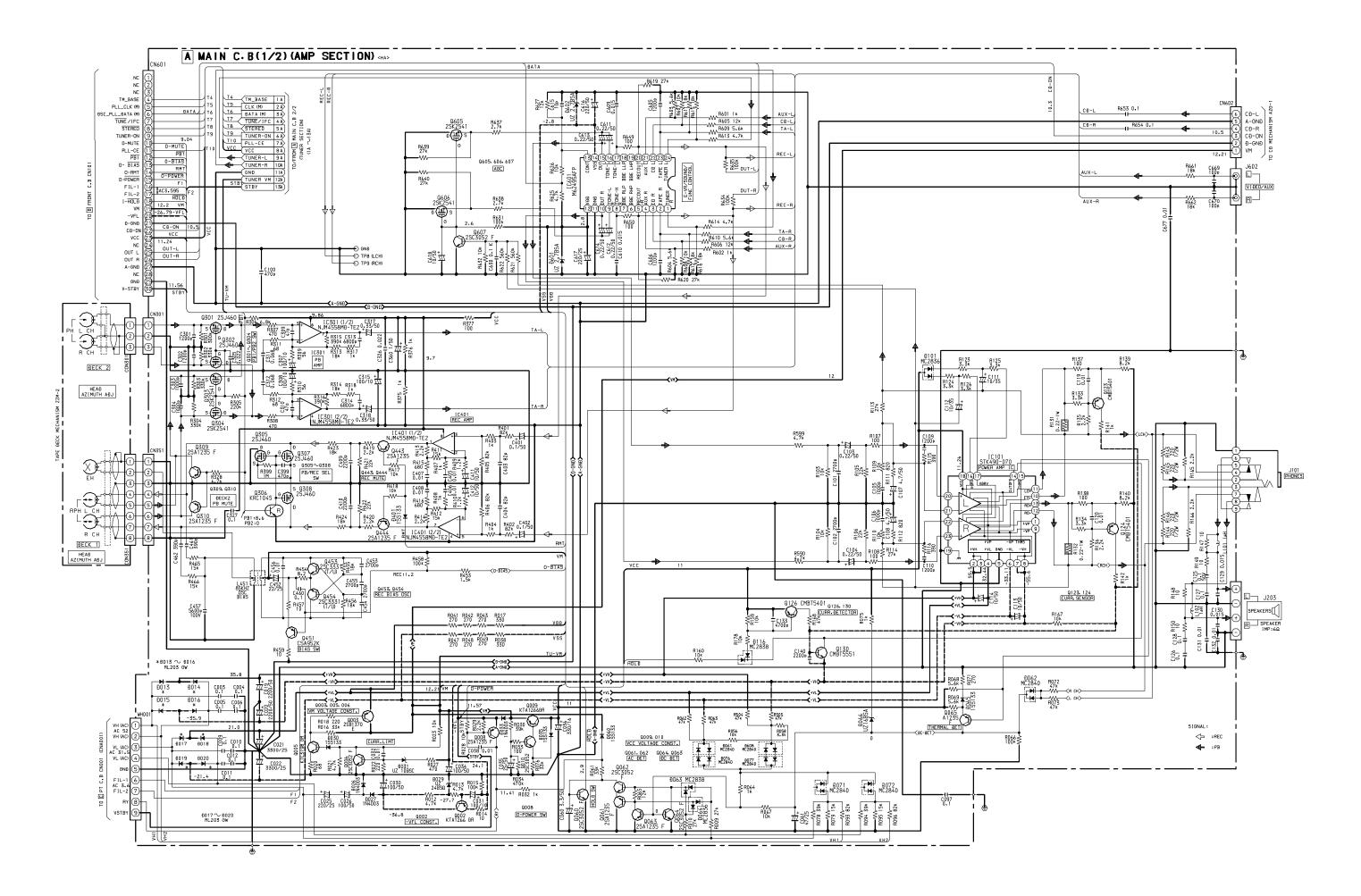


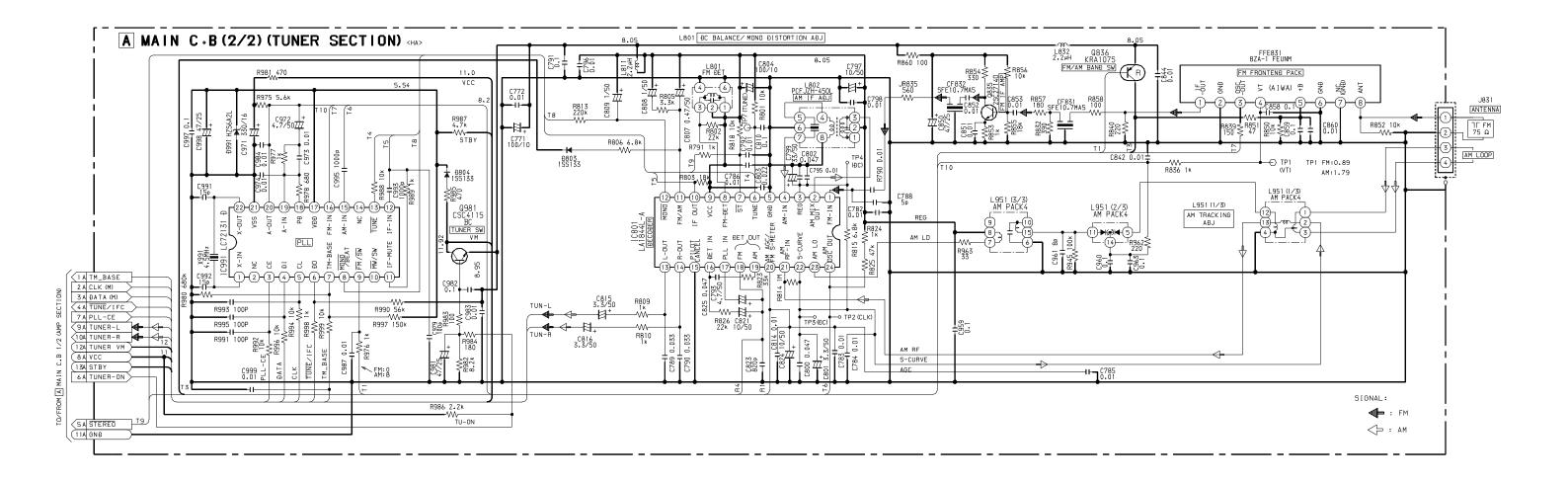
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106	-	S7		S11	S5	S2	S12	98	S3	S10	88	88	S4	S1	ı	ı	Q	a,d,g	q	υ	a
	<u>a</u>	P2	РЗ	P4	PS	P6	Р7	P8	PB	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21

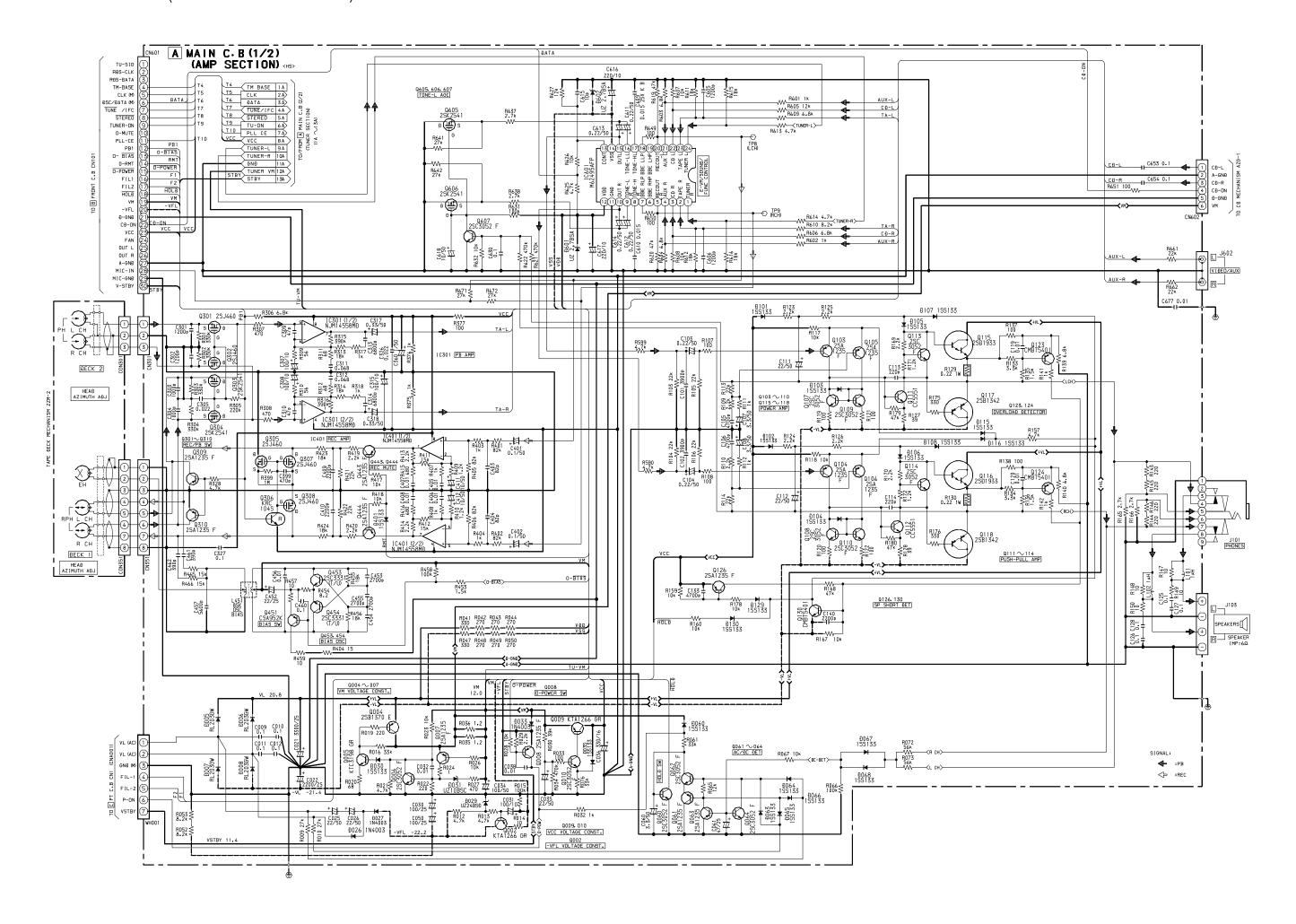


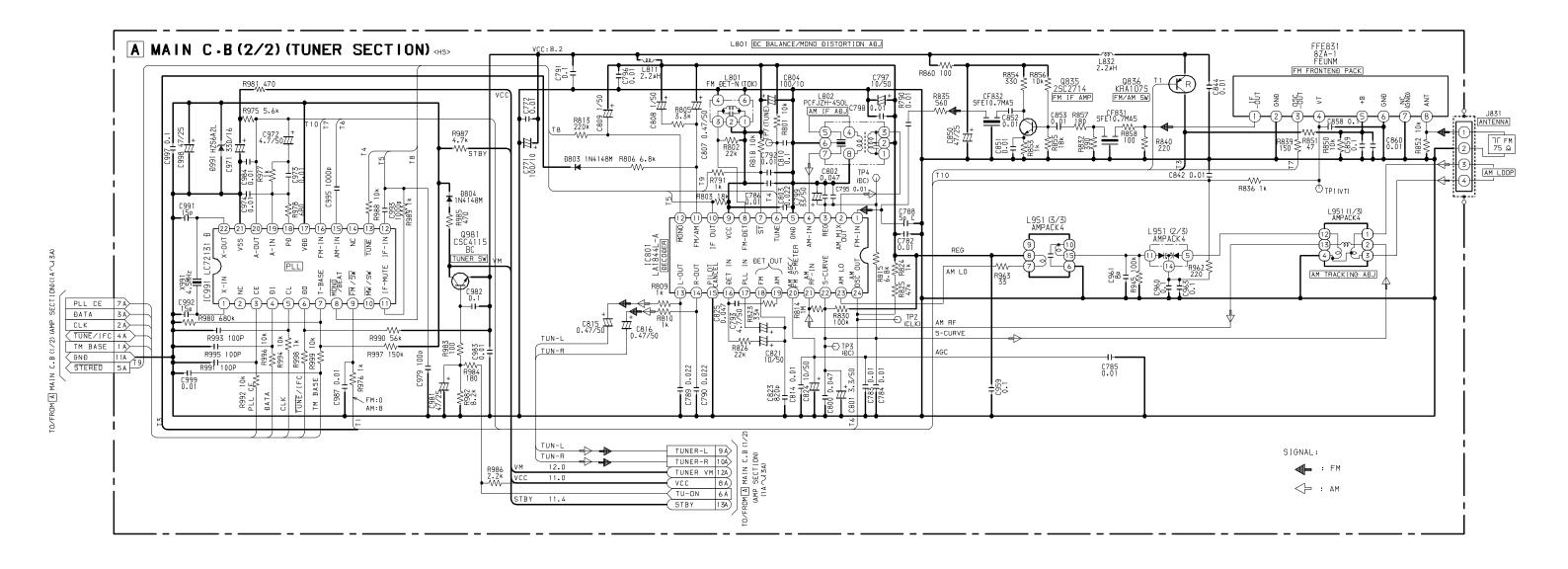


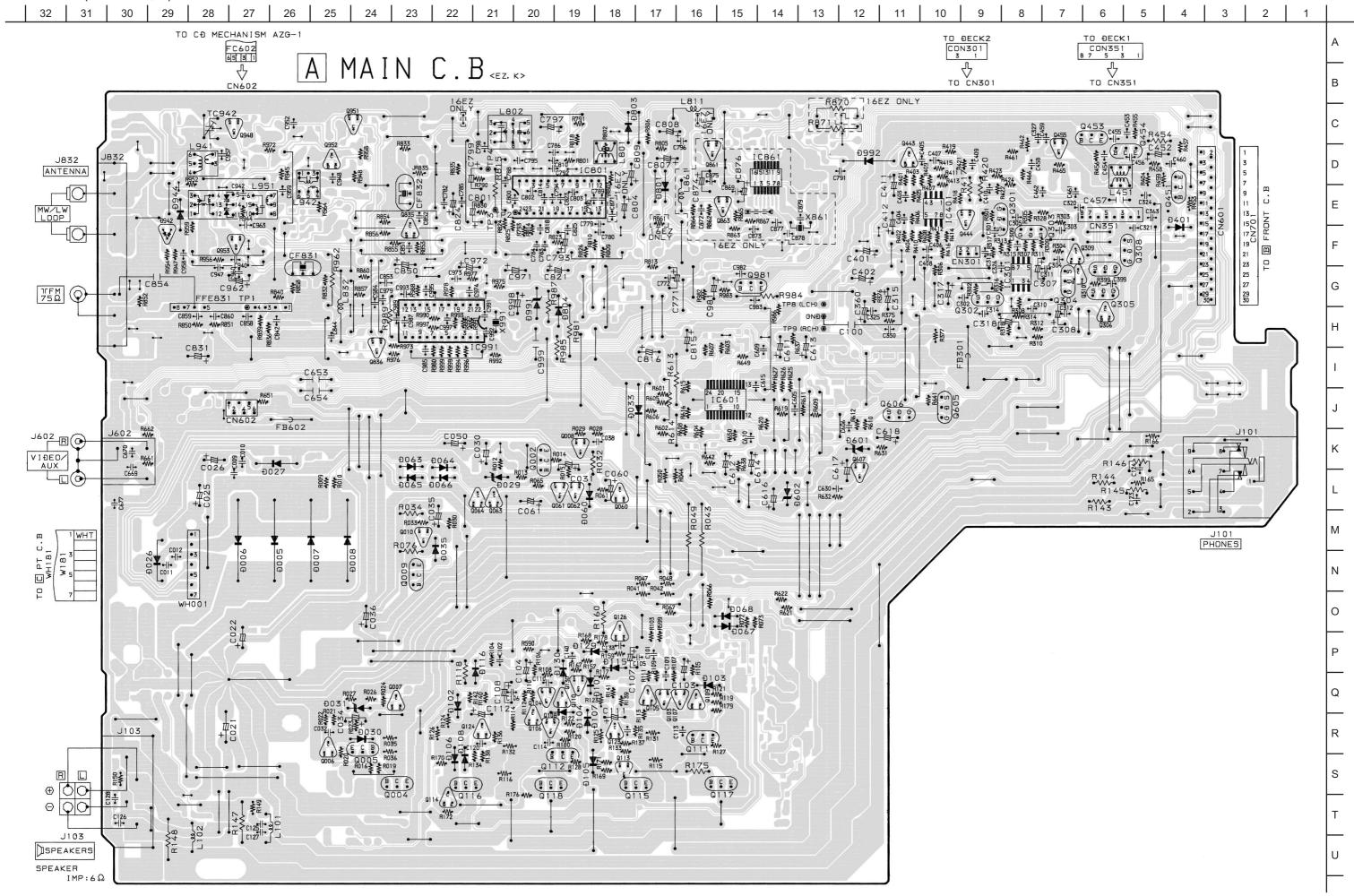


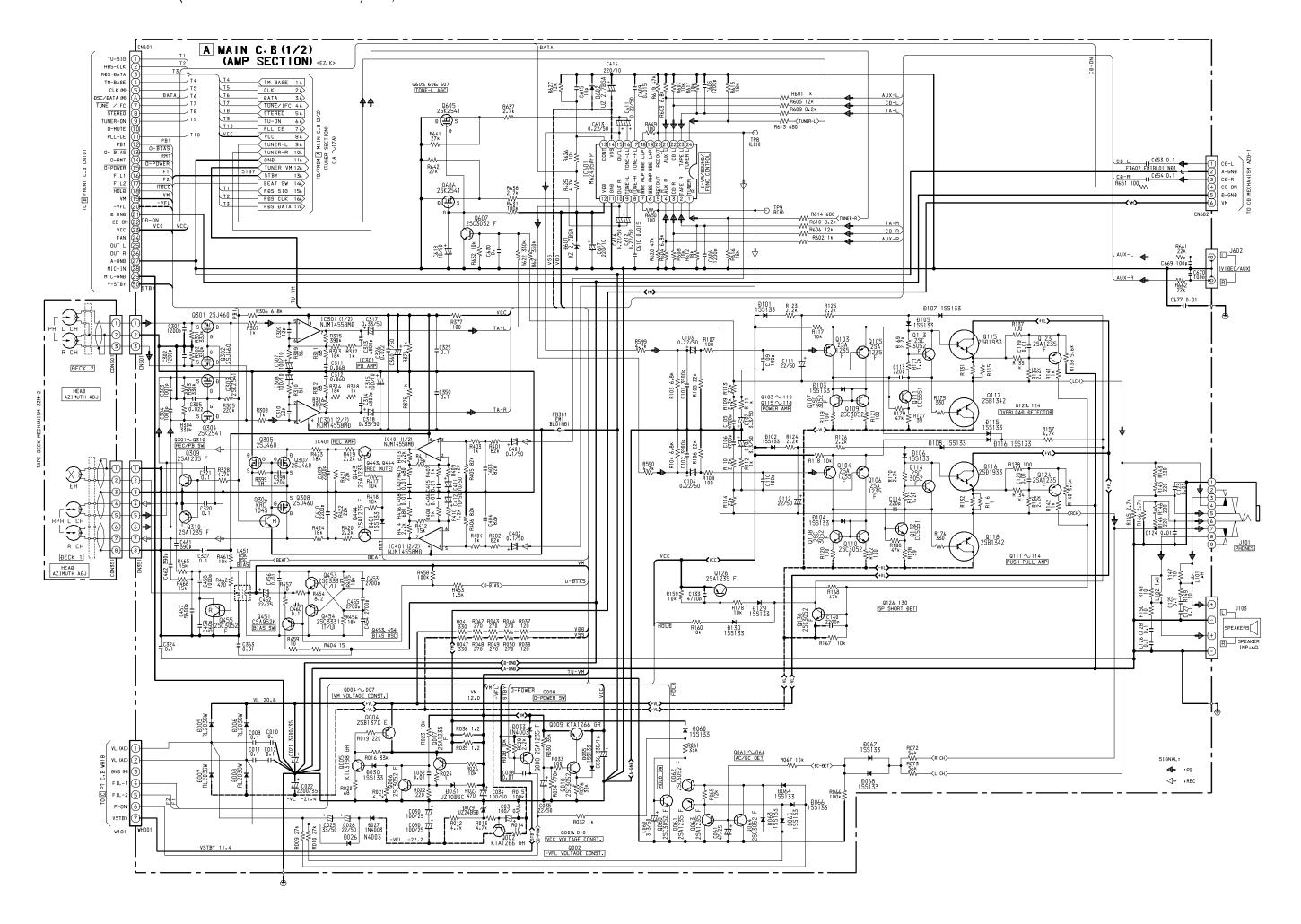


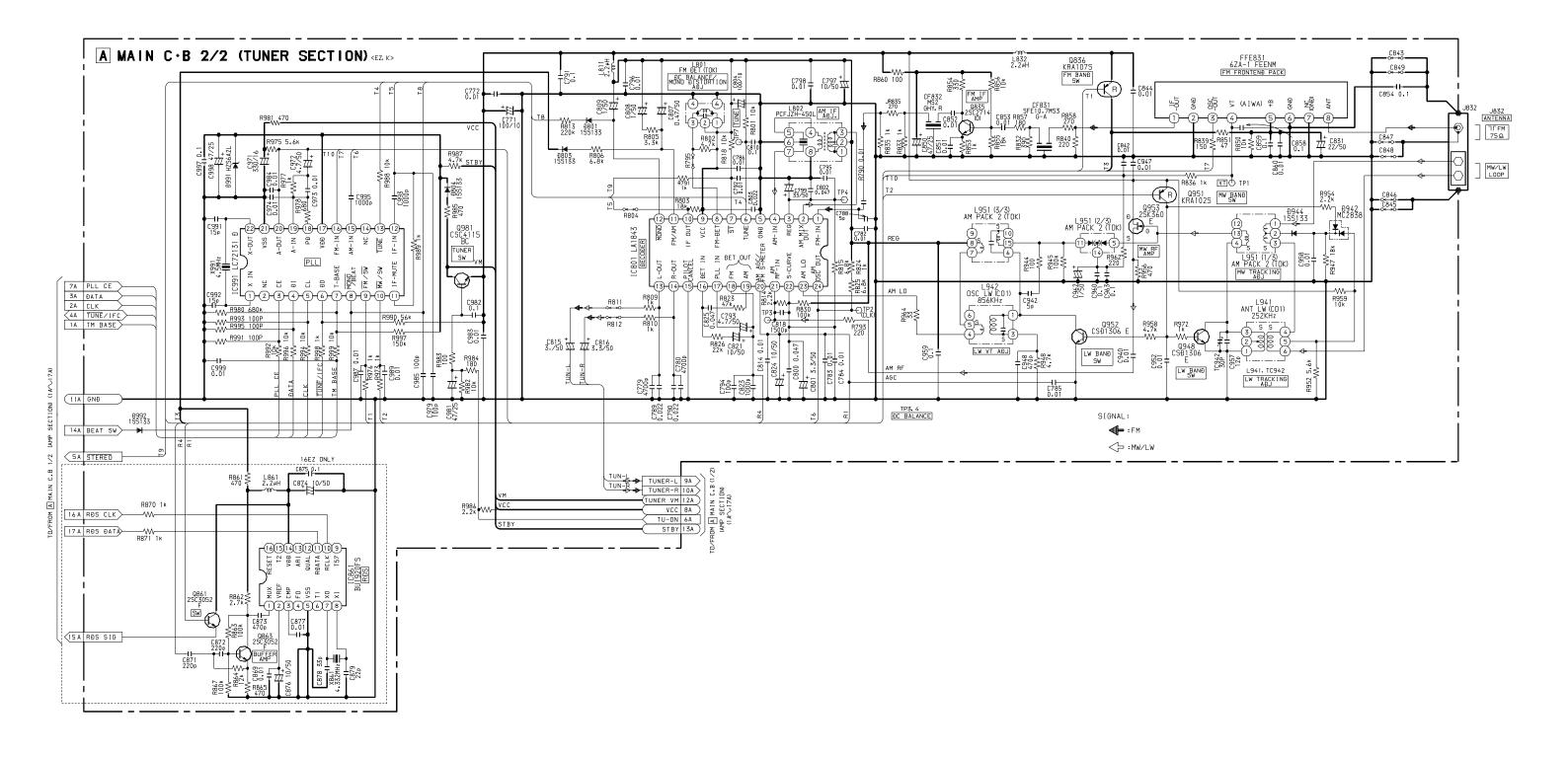


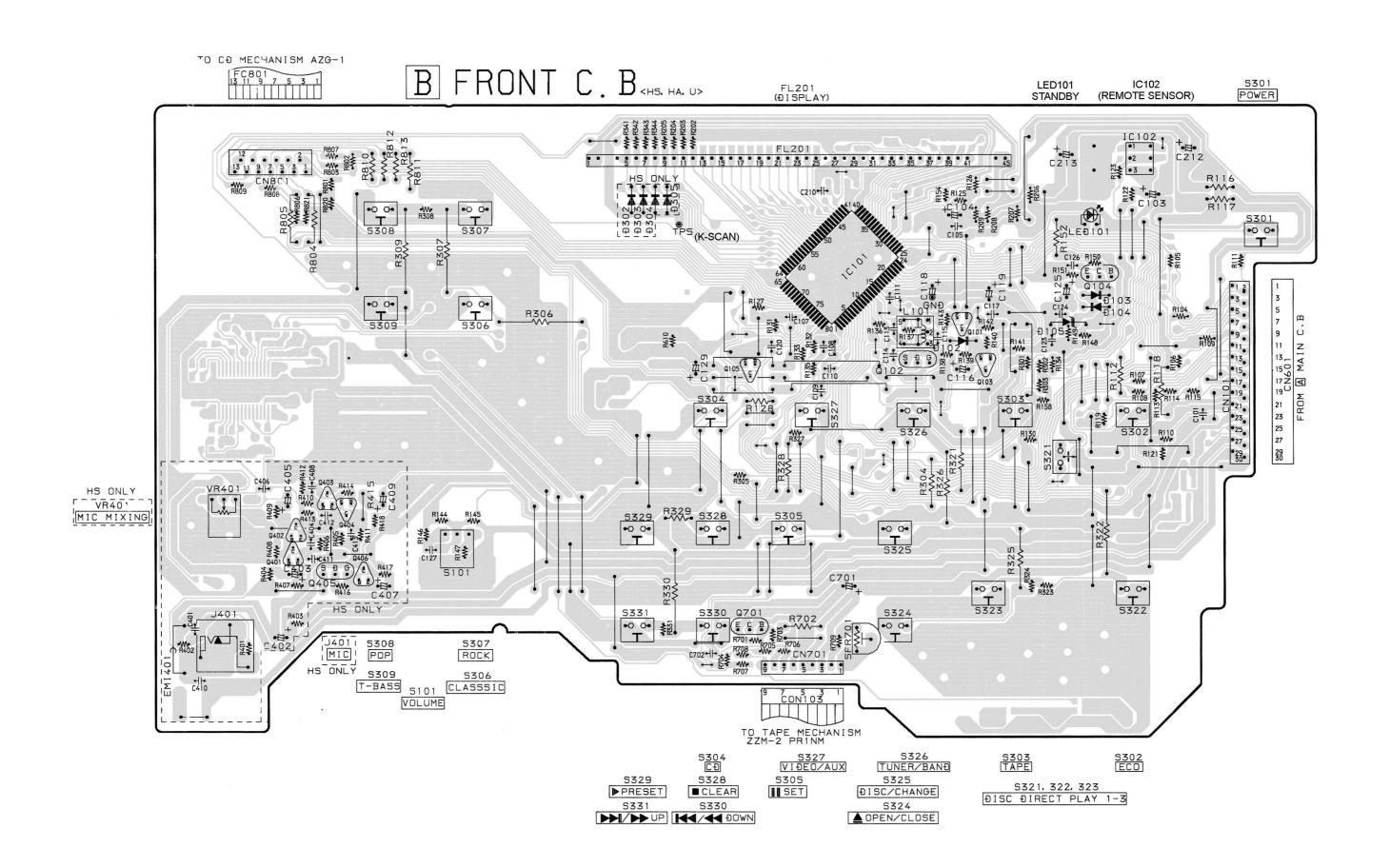


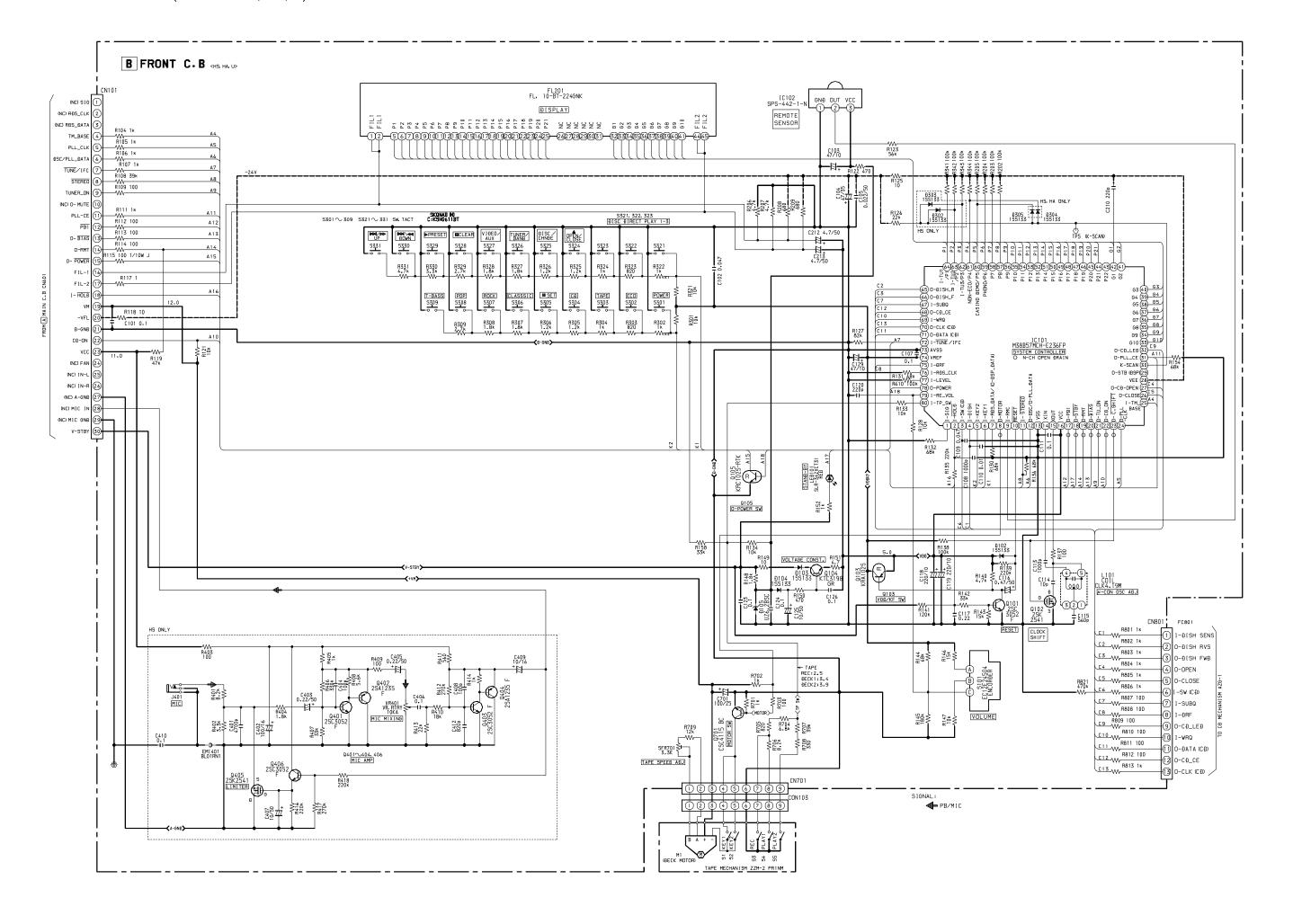


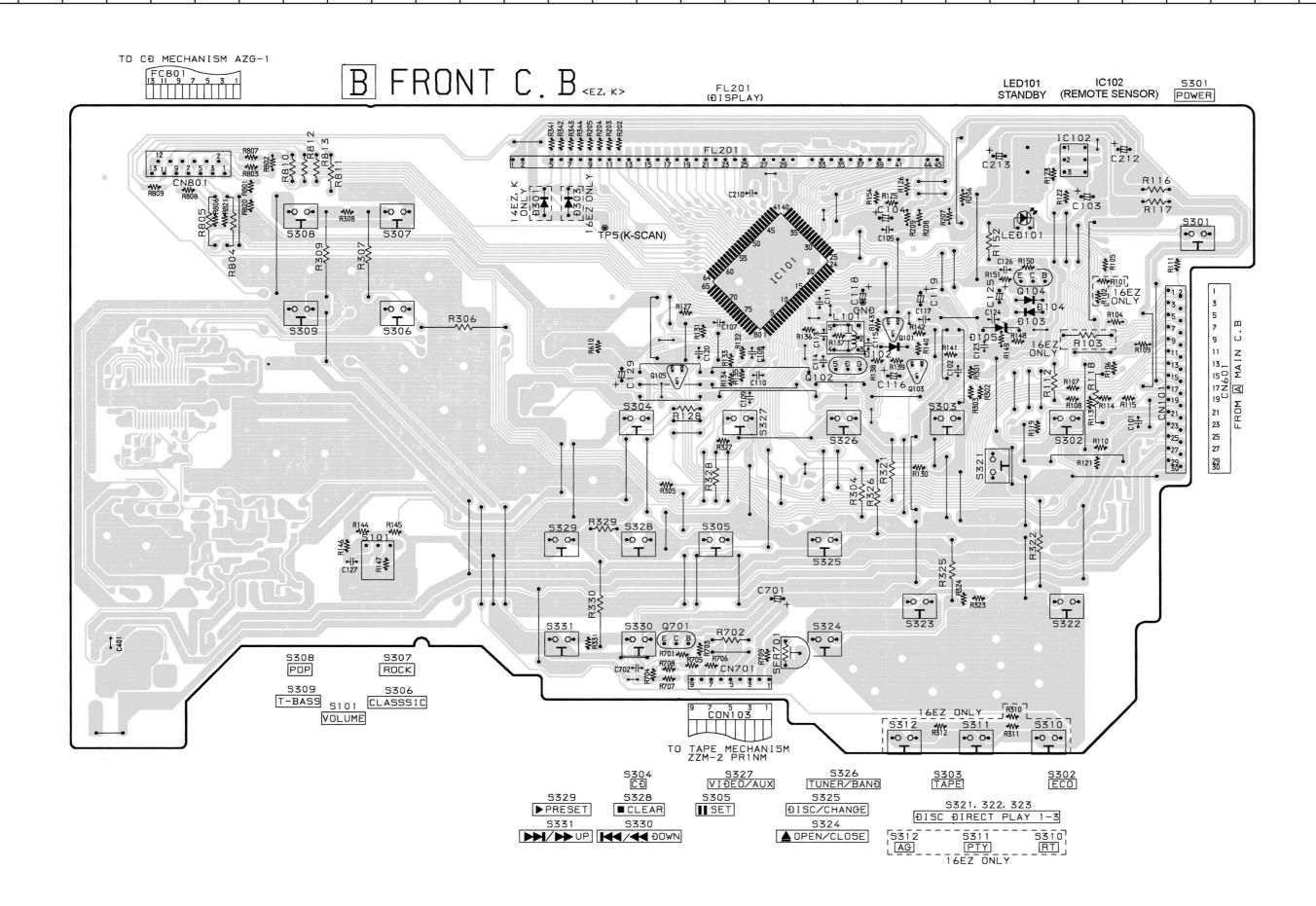




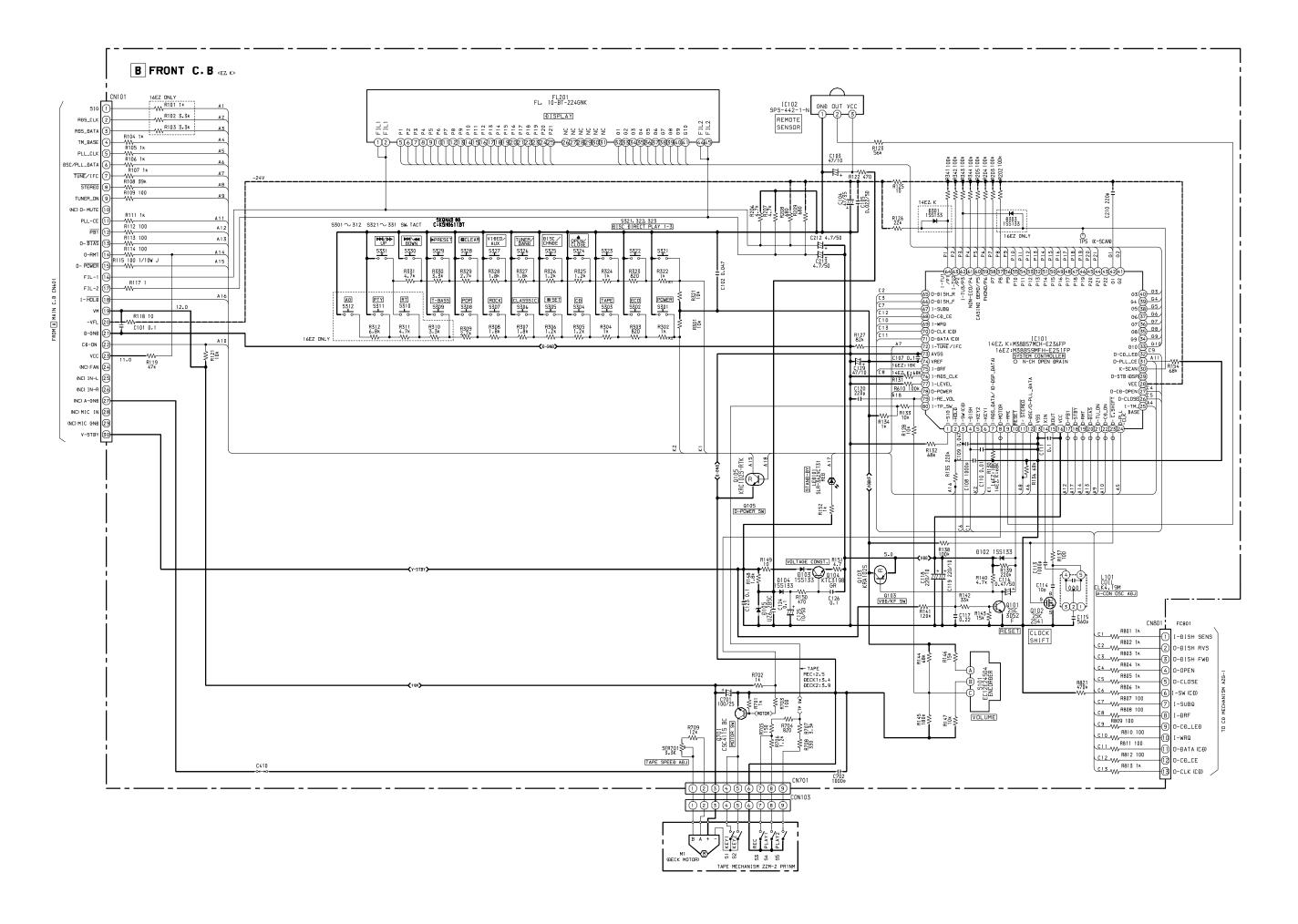








32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 |



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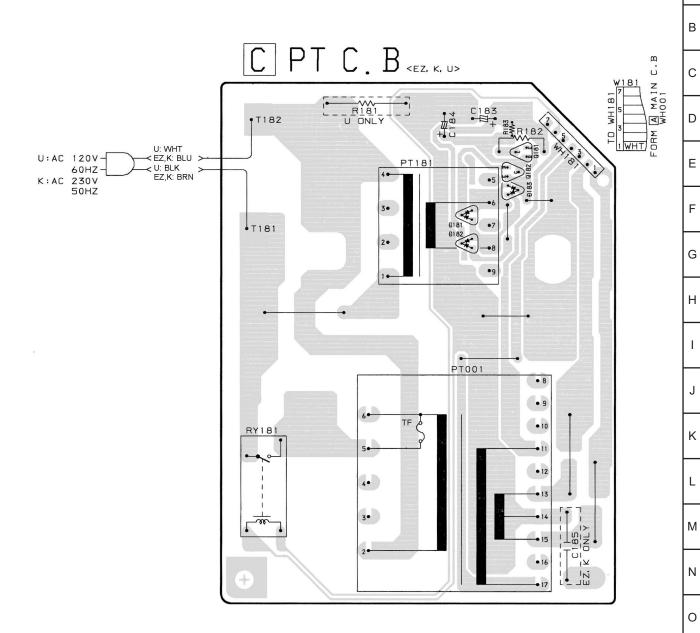
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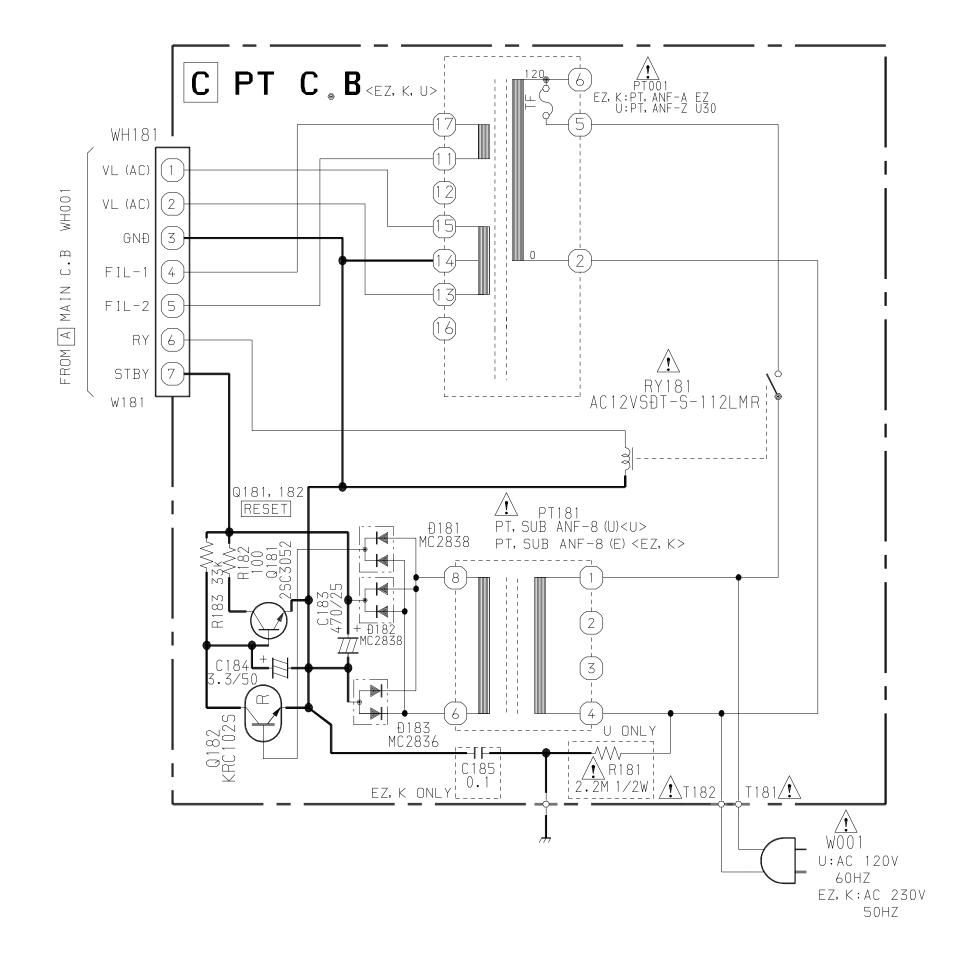
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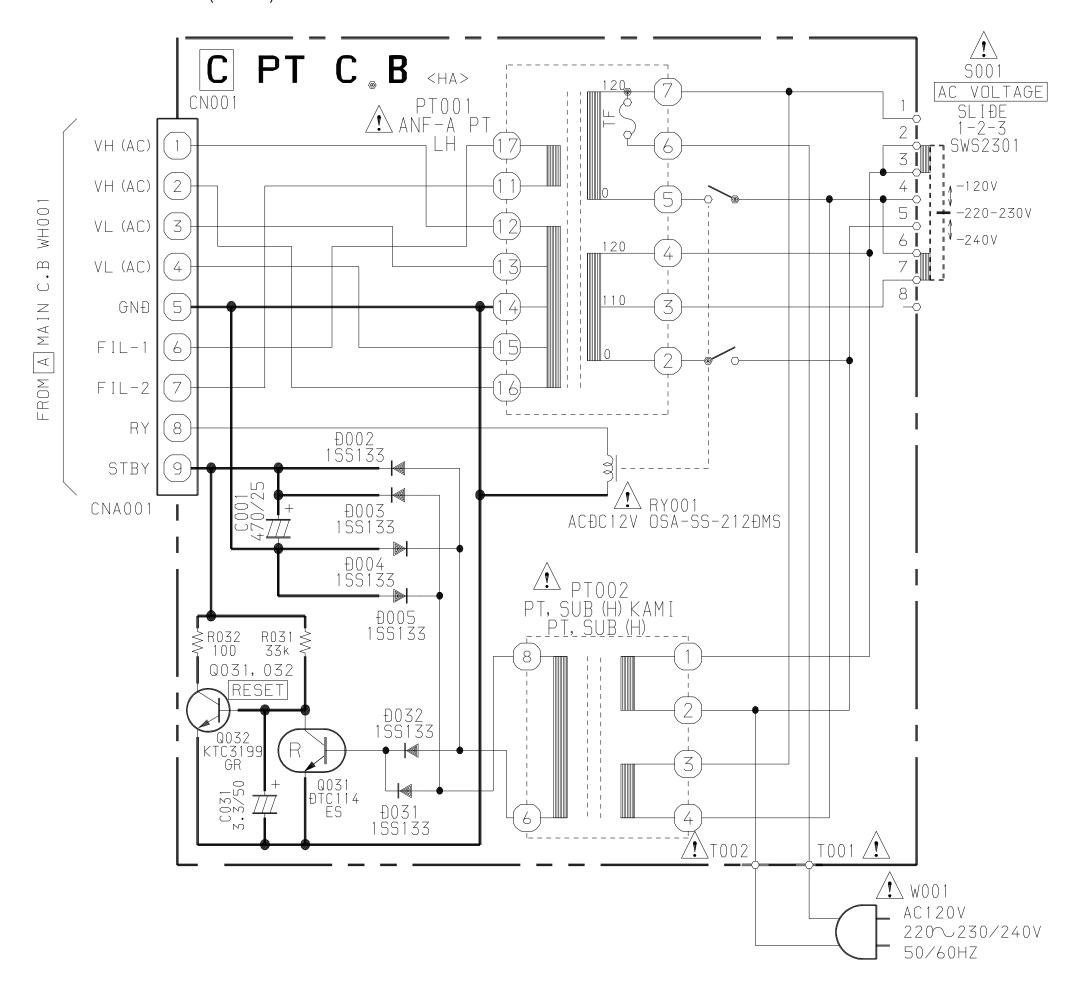
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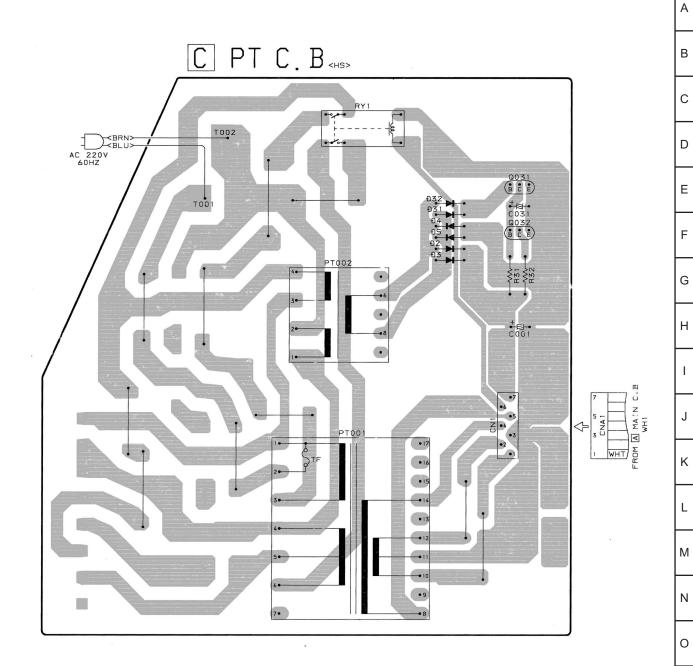
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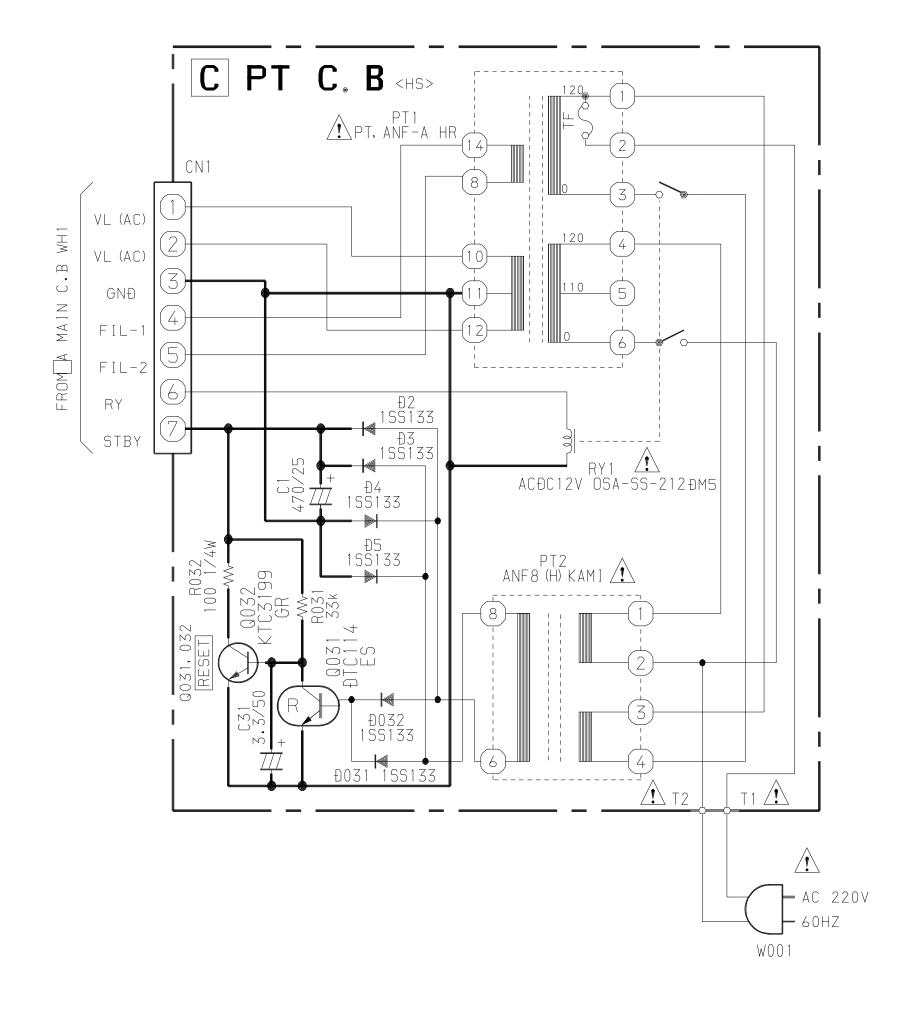
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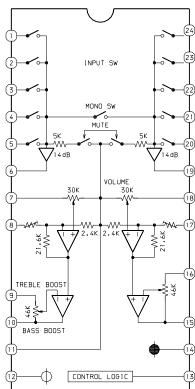
CON103

FROM B FRONT C.B
CN701

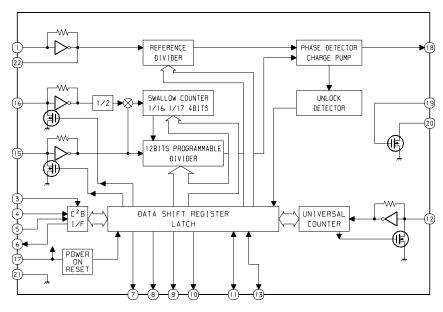
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# IC BLOCK DIAGRAM

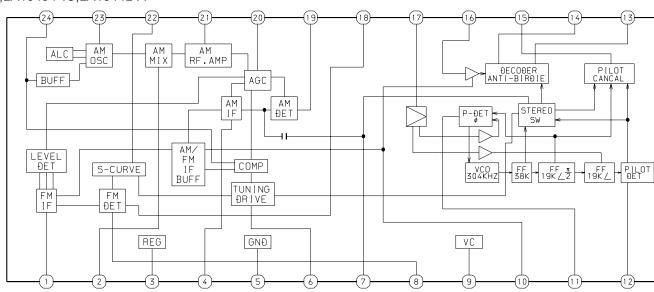
# IC,M62495AFP



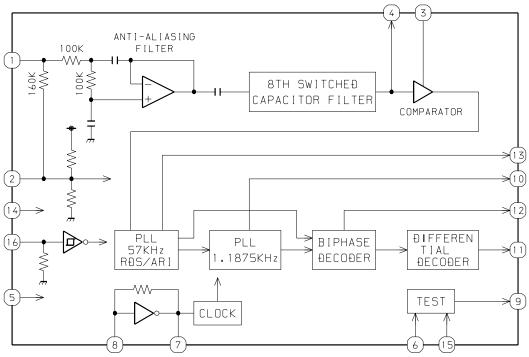
# IC,LC72131D



# IC,LA1843 / IC,LA1844L-A



# IC,BU1920FS

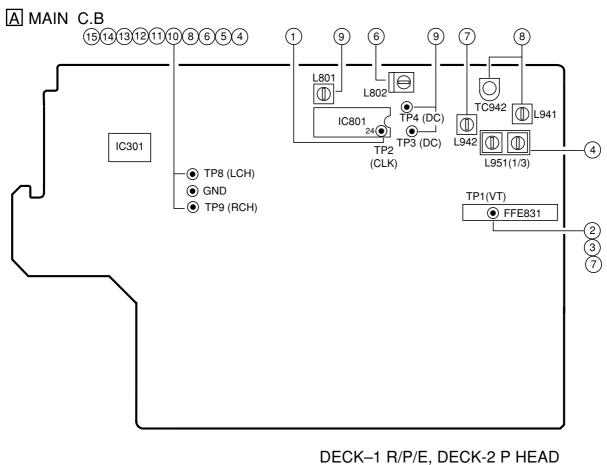


# IC DESCRIPTION

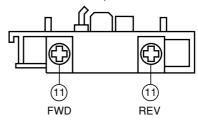
# IC, M38B57MCH-E236FP / M38B59MFH-E251FP

Di N	D: 37	T/0	D ' ' '
Pin No.	Pin Name	I/O	Description
1	I-SIG	I	RDS signal level A/D input. (Not used)
2	I-HOLD	I	Hold voltage level A/D input.
3	I-SW (CD)	I	CD mecha SW A/D input.
4	I-DISH	I	CD turn-table position check A/D input.
5	I-KEY2	I	KEY2 A/D input.
6	I-KEY1	I	KEY1 A/D input.
7	I-RDS-DATA/	I/O	RDS data input / DSP IC data (V-CD) output. (Not used)
	(O-DSP_DATA)	-, -	
8	O-MOTOR	О	Deck motor supply ON/OFF output.
9	I-RMC	I	System remote control signal input. ("L"=ACTIVE)
10	RESET	I	System reset input. ("L"=RESET)
11	I-STEREO	I	Tuner stereo input. ("L"=STEREO)
12	O-DSC/O-PLL_DATA	О	Function IC control & PLL data output.
13	VSS	-	GND.
14,15	XIN, XOUT	I/O	4.19MHz system CLK input / output.
16	VCC	-	Power supply input.
17	O-PB1	О	Deck 1/2 switch output. ("L"=PLAYBACK DECK 1)
18	O-STBY	О	Standby LED ON/OFF output. ("L"=ON)
19	O-RMT	О	REC mute output. ("H"=MUTE)
20	O-BIAS	О	Record bias ON/OFF output. ("L"=ON)
21	O-TU_ON	О	Tuner supply ON/OFF output. ("H"=ON)
22	O-CD_ON	О	CD supply ON/OFF output. ("H"= ON)
23	O-C.SHIFT	О	MICON clock shift output. ("L"=SHIFT)
24	O-PLL-CLK	О	PLL IC CLK output.
25	I-TM_BASE	I	8 Hz time base input.
26	O-CLOSE	О	CD door close output.
27	O-CD-OPEN	О	CD door open output.
28	VEE	_	Power supply input for FL display.
29	O-STB(DSP)	0	DSP IC strobe output. (Not used)
30	K-SCAN	0	Initial key scan output.
31	O-PLL_CE	0	CD PLL IC chip enable output.
32	O-CD_LED	0	CD flash window LED output.
33~42	G10~G1	0	FL grid output (G10~G1).
43	P22	0	FL segment output (P22). (Not used)
44~58	P21~P7	0	FL segment output (P21~P7).
59	PHONO/P6	I/O	PHONO diode input / FL segment output (P6).
60	CASINO DEMO/P5	I/O	CASINO DEMO diode input (Not used) / FL segment output (P5).
61	NON-ECO/P4	I/O	ECO OFF diode input / FL segment output (P4).
62	I-TU3/P3	I/O	TU 3 diode input (Not used) / FL segment output (P3).
63	I-TU2/P2	I/O	TU 2 diode input (Not used) / FL segment output (P2).
		-	
64	I-TU1/P1	I/O	TU 1 diode input (Not used) / FL segment output (P1).

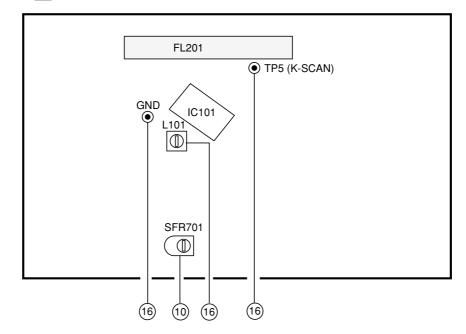
Pin No.	Pin Name	I/O	Description
65	O-DISH_R	О	CD turn-table reverse turn output.
66	O-DISH_F	О	CD turn-table forward turn output.
67	I-SUBQ	I	Sub code-Q data input.
68	O-CD_CE	О	CD DSP chip enable output.
69	I-WRQ	I	CD WRQ input.
70	O-CLK (CD)	О	CD control clock output.
71	O-DATA (CD)	О	CD control data output.
72	I-TUNE/IFC	I	Tuner SD input / IF count input.
73	AVSS	-	GND.
74	VREF	-	Reference voltage.
75	I-DRF	I	CD DRF input.
76	I-RDS_CLK	I	RDS clock input. (Not used)
77	I-LEVEL	I	Connected to GND through a resistor.
78	O-POWER	О	SYSTEM Power ON/OFF output. ("H"=ON)
79	I-RE_VOL	I	Rotary encoder A/D input.
80	I-TP_SW	I	Deck mecha SW A/D input.







# B FRONT C.B



### < TUNER SECTION >

#### 1. Clock frequency Check

Settings: • Test point: TP2 (CLK)

Method : Set to AM 1710kHz(U, HA), MW 1602kHz(HS,EZ,K) and check that the test point is  $2160kHz \pm 0.045kHz(U, HA)$ ,  $2052kHz \pm 0.045kHz(HS,EZ,K)$ .

2. AM(MW) VT Check

Settings: • Test point: TP1 (VT)

Method: Set to AM 1710kHz(U,HA), MW 1602kHz(EZ,K,HS) and check that the test point is less than 8.5V(U,HA), less than 8.0V (EZ,K,HS).

Then set to 530kHz(U,HA), 531kHz(EZ,K,HS) and

check that the test point is more than 0.6V.

#### 3. FM VT Check

Settings: • Test point: TP1 (VT)

Method: Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

4. AM(MW) Tracking Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location :

L951 (1/3) ...... 1000kHz

Method: Set to AM(MW) 999kHz and adjust L951 (1/3) to MAX.

5. FM Tracking Check

Settings: • Test point: TP8(Lch), TP9(Rch)

Method : Set to FM 98.0MHz and check that the test point is less than  $9dB\mu V(U,HA,HS)$ , less than  $13dB\mu V(EZ,K)$ .

6. AM(MW) IF Adjustment

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location:

# 7. LW VT Adjustment<EZ,K>

Settings: • Test point: TP1(VT)

• Adjustment location: L942

Method : Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V  $\pm\,0.05$  V.

Then set to LW 290kHz and check that the test point is less than 8.0V.

### 8. LW Tracking Adjustment<EZ,K>

Settings: • Test point: TP8(Lch), TP9(Rch)

• Adjustment location:

Method: Set up TC942 to center before adjustment. The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC942.

# 9. DC Balance / Mono Distortion Adjustment

Settings: • Test point: TP3, TP4 (DC Balance)

• Adjustment location : L801

• Input level : 60dBµV

Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V  $\pm$  400 mV with

minimum distortion.

### < DECK SECTION >

### 10. Tape Speed Adjustment (DECK 1)

Settings: • Test tape: TTA-100

• Test point : TP8(Lch), TP9(Rch)

• Adjustment location : SFR701

Method : Play back the test tape and adjust SFR701 so that the frequency counter reads 3000Hz  $\pm$  5Hz.

# 11. Head Azimuth Adjustment (DECK 1, DECK 2)

Settings: • Test tape: TTA-330

Test point : TP8(Lch), TP9(Rch)Adjustment location : Head azimuth

adjustment screw

Method: Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.

Next, perform on REV PLAY mode.

### 12. PB Frequency Response Check (DECK 1, DECK 2)

Settings: • Test tape: TTA-330

• Test point :TP8(Lch), TP9(Rch)

Method: Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 4dB.

# 13. PB Sensitivity Check (DECK 1, DECK 2)

Settings: • Test tape: TTA-200

• Test point : TP8(Lch), TP9(Rch)

Method : Play back the test tape and check that the output level of the test point is  $110\text{mV} \pm 3.5\text{dB}$ .

# 14. REC/PB Frequency Response Check (DECK 1)

Settings: • Test tape: TTA-602

• Test point : TP8(Lch), TP9(Rch)

• Input signal: 1kHz / 8kHz (LINE IN)

Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes -20VU. Record and play back the 1kHz and 8kHz signals and check that the output of the 8kHz signals is  $0dB \pm 5dB$  with respect to that of the 1kHz signal.

# 15. REC/PB Sensitivity Check (DECK 1)

Settings: • Test tape: TTA-602

• Test point : TP8(Lch), TP9(Rch)

• Input signal : 1kHz (LINE IN)

Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is  $-2dB \pm 3.5dB$ .

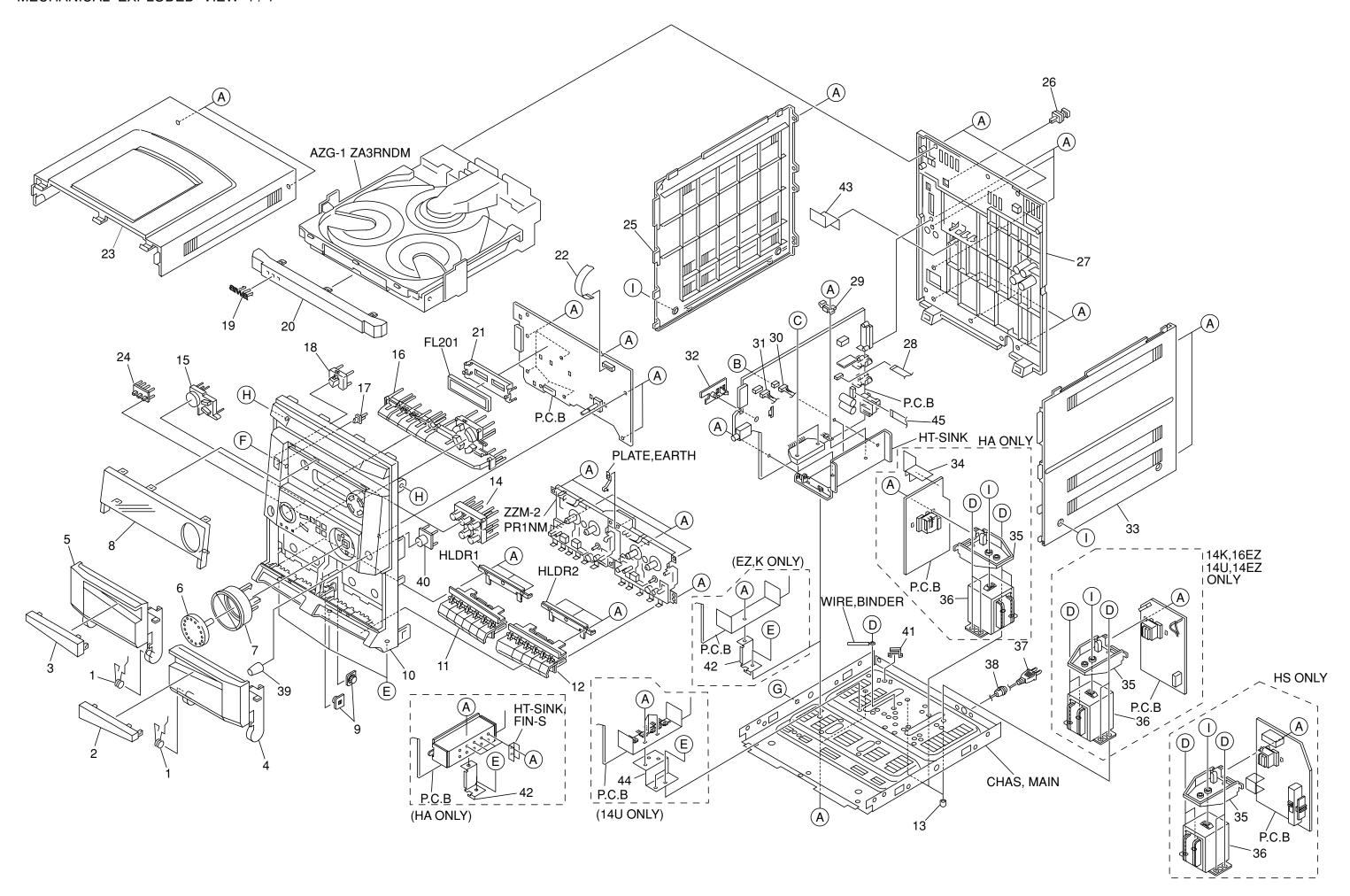
# < FRONT SECTION >

# 16. u-CON OSC Adjustment

Settings: • Test point: TP5(K-SCAN)

• Adjustment location: L101

Method: Insert AC plug with pressing of TUNER function key and POWER key. Adjust L101 so that the frequency across the test point is 58.350Hz ± 0.02Hz.

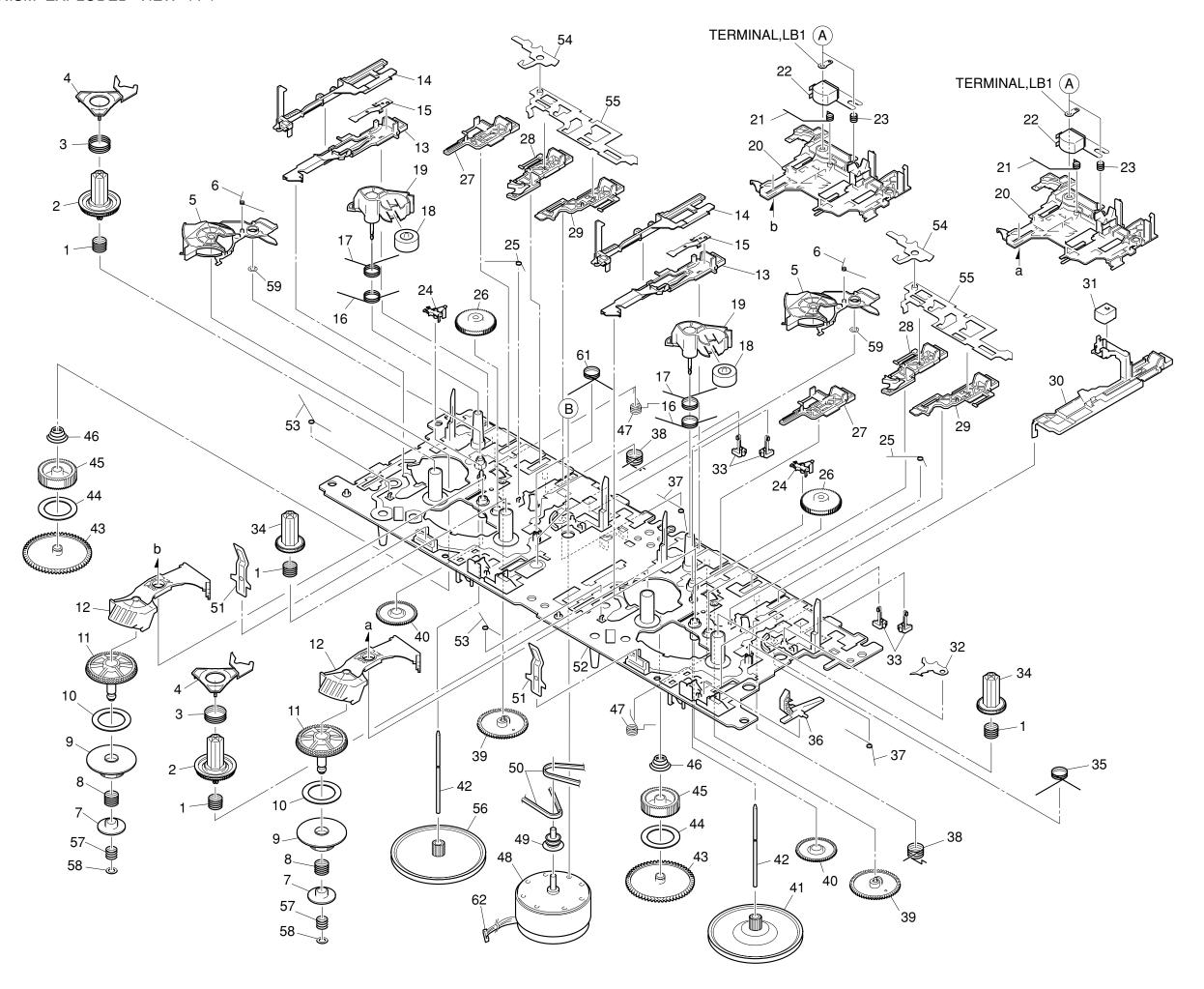


# MECHANICAL PARTS LIST 1/1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	). PART NO		Kanri No.	DESCRIPTION
1	82-NF7-218-010	SPR-7	r, CASS	27	8A-NFZ-	-033-010	CABI, RE	AR USM AJ14<14U>
2	8A-NFZ-007-010	WINDO	DW,CASS 2	28	88-906-	251-110	FF-CABL	E,6P 1.25
3	8A-NFZ-006-010		DW, CASS 1	29	8A-NF8-	205-010		
4	8A-NFZ-004-010	BOX, C	CASS 2	30	8A-NFA-	-633-010	CONN AS	SY,3P (PH)
5	8A-NFZ-003-010	BOX, O	CASS 1	31	8A-NFA-	-634-010	CONN AS	SY,8P RPB
	8A-NFZ-011-010		RTRY VOL			214-010		B M ANFA
	8A-NFZ-012-010	RING,	, VOL			-065-010		IGHT V-2<14HS,14EHA>
	8A-NFZ-054-010		DW,DISP EZ BL16<16EZ>	33	8A-NFA-	067-010	PANEL,R	IGHTV-2PL <except 14hs,14eha=""></except>
	8A-NFZ-051-010		DW, DISPH<14HS, 14K, 14EZ>	34	8A-NFA-	-212-010	PLATE, P	L LH<14EHA>
8	8A-NFZ-055-010	WINDO	DW,DISP HA BL14E<14EHA>	35	8A-NF9-	-211-010	HLDR,PW	B PT HI
8	8A-NFZ-052-010	WINDO	OW,DISP U AJ14<14U>	₫ 36	8A-NFA-	608-010	PT, ANF-	A EZ<14K,14EZ,16EZ>
9	86-NFZ-231-010	DMPR,	,70	₫ 36	8A-NFA-	-606-010	PT, ANF-	A HR<14HS>
10	8A-NFZ-042-010	CABI,	FR EZ<16EZ>	<u> </u>	8A-NFA-	-609-010	PT, ANF-	A LH<14EHA>
10	8A-NFZ-041-010	CABI,	FR H<14HS>	<u> </u>	8A-NFA-	607-010	PT, ANF-	A U<14U>
10	8A-NFZ-001-010	CABI,	FR U <except 14hs,16ez,14u=""></except>	₫ 37	87-A80-	105-010	AC CORD	ASSY, AZ<14EHA>
10	8A-NFZ-043-010	CABI,	FR U AJ14<14U>	⚠ 37	87-A80-	157-010	ACCORDAS	SY,EBLKCC <except 14hs,14eha,14u=""></except>
11	8A-NFZ-016-010	KEY, C	CASS 1	⚠ 37	87-A80-	155-010		ASSY, HS TS<14HS>
12	8A-NFZ-017-010	KEY, C	CASS 2P	1 37	87-A80-	110-010	AC CORD	ASSY,U SPT-2W<14U>
13	8Z-NB8-240-010	COVE	R, PL <except 14hs=""></except>	38	87-085-	-185-010	BUSHING	, AC CORD (E) < EXCEPT 14U>
14	8A-NFZ-010-010	KEY, C	DPE	38	87-A91-	422-010	BUSHING	,AC CORD(U)<14U>
15	8A-NFZ-013-010	KEY, C	CD	39	8A-NFZ-	020-010	KNOB, RT	RY MIC BL<14HS>
16	8A-NFZ-009-010	KEY, E	FUN <except 14u=""></except>	40	8A-NFZ-	047-010	PLATE, M	IC BL<14HS>
16	8A-NFZ-072-010	KEY, E	FUN AJ14<14U>	41	87-NF4-	221-010	HLDR, CA	BLE <except 14eha=""></except>
17	8A-NFA-018-010	REFLE	ECTOR, ECO	42	88-NF9-	213-010	HLDR, PW	B MAIN <except 14eha,14u=""></except>
18	8A-NFZ-008-010	KEY, E	POWER <except 14u=""></except>	43	8A-NFA-	-215-010	PLATE, P	L HR<14HS>
	8A-NFZ-071-010	,	POWER AJ14<14U>			202-010		-SINK S STEEL<14U>
	87-CE3-023-010		E,AIWA 30N SILV			628-010		7P-2.5<14K,14EZ,16EZ,14U>
	8A-NFZ-002-010		L,TRAY H <except 14u=""></except>			703-010		SCREW, BVT2+3-10
	8A-NFZ-044-010		L,TRAY U AJ14<14U>		87-NF4-			,IT3B+3-8 CU
21	8A-NFA-208-010	GUIDE	E,FL 100-25 ANFA	С	87-067-	-581-010	TAPPING	SCREW, BVT2+3-15<14EHA>
	88-913-221-110		ABLE, 13P 1.25 220MM			191-010		,IT+4-10
	8A-NFA-062-010		L,TOP V-2		87-067-		BVTT+3-	
	8A-NFZ-014-010		RDS<16EZ>			-096-410		OW/O SLOT BL
	8A-NFA-063-010		L,LEFT V-2			096-410		0 GLD<14EHA>
26	84-ZG1-245-210	CAP,	PTICAL	Н	87-721-	097-410	QT2+3-1	2 GLD
27	8A-NFZ-024-010		REAR EZSM BL14<14EZ>	I	87-067-	641-010	UTT2+3-	8(W/O SLOT)BL
27	8A-NFZ-025-010	CABI,	REAR EZSM BL16<16EZ>					
27	8A-NFZ-030-010	CABI,	REAR HS W/O SPEC<14HS>					
27	8A-NFZ-026-010	CABI,	REAR KSM<14K>					
27	8A-NFA-030-010	CABI,	REAR LH W/O SPEC<14EHA>					

# COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
В	Black	С	Cream	D	Orange
G	Green	Н	Gray	L	Blue
LT	Transparent Blue	N	Gold	Р	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		



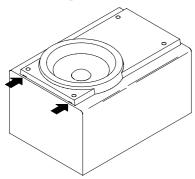
# TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	Kanri No.	DESCRIPTION
1	8Z-ZM1-254-210		PERT. P	36	8Z-ZM1-220-110	T.FVFP PI	C SENSOR
	8Z-ZM1-225-110				8Z-ZM1-249-010		
	8Z-ZM1-253-110				8Z-ZM1-242-110		
4	8Z-ZM1-217-110	LEVER	AUTO SENSOR		8Z-ZM1-229-010		
	8Z-ZM1-212-110				8Z-ZM1-232-010	, ,	
3	02 201 212 110	DD VDIC,	1 01	10	02 201 252 010	Olint, 1D1	3 11/KBN
6	8Z-ZM1-245-010	SPR-T,	AUTO	41	8Z-ZM1-234-010	FLY-WHL,	ZZM-1
	8Z-ZM1-236-010		IP FF/REW		8Z-ZM1-267-010		
	8Z-ZM1-252-010		FF/REW		8Z-ZM1-228-010		IP T-UP B
9	8Z-ZM1-230-010	GEAR, S	LIP FF/REW A	44	8Z-ZM1-265-010	FELT, T-U	JP
10	8Z-ZM1-269-010	FELT, F	F/REW 2		8Z-ZM1-227-010		IP T-UP A
		•				•	
11	8Z-ZM1-238-110	GEAR, S	LIP FF/REW B 2	46	8Z-ZM1-251-110	SPR-C, T-	-UP SLIP
12	8Z-ZM1-237-010	LEVER,	FF/REW 2	47	8Z-ZM1-243-210	SPR-T,ST	TOP/PAUSE
13	8Z-ZM1-209-210	LEVER,	PAUSE	48	87-A91-532-010	MOT,MS15	5U2LW1A
14	8Z-ZM1-218-110	LEVER,	E-LOCK H	49	8Z-ZM1-235-010	PULLEY, N	TON
15	8Z-ZM1-256-010	SPR-P,	PAUSE	50	8Z-ZM2-216-010	BELT, MAI	IN M
	8Z-ZM1-244-010		T-UP	51	8Z-ZM1-260-010	SPR-P,CA	ASETTE
	8Z-ZM1-247-210			52	8Z-ZM2-201-010	CHAS ASS	SY,ZZM-2
	8Z-ZM1-261-110		ASSY, PINCH	53	8Z-ZM1-255-110	SPR-T,E-	-LOCK
19	8Z-ZM1-221-010			54	8Z-ZM2-219-010	LEVER, E-	-OPEN ZZM-2
20	8Z-ZM1-205-210	LEVER,	PLAY	55	8Z-ZM1-214-110	LEVER, LO	OCK
21	8Z-ZM1-248-110			56	8Z-ZM2-211-010		
	87-A90-403-110				8Z-ZM1-257-110		
	84-ZM2-227-310				8Z-ZM1-275-010		
	8Z-ZM1-216-010				80-ZM6-243-010		-3.6-0.5 SLT
25	8Z-ZM1-246-010	SPR-T,	AUTO 2	60	87-A91-494-010	SW,LEAF	MSW17820
	8Z-ZM2-214-010		DL REW ZZM-2		8Z-ZM1-241-010		
	8Z-ZM2-212-010		STOP ZZM-2		8Z-ZM2-601-010		SY,9P ZZM-2
	8Z-ZM1-207-010				84-ZM2-242-010		,AZ1-2-6.4
	8Z-ZM1-206-010	LEVER,		В	8Z-ZM2-220-110	V+2.6 Z2	ZM-2
30	8Z-ZM1-210-010	LEVER,	REC				
	87-A90-404-010						
	8Z-ZM2-218-010		REC LOCK ZZM-2				
	87-A91-492-010	,	F MSW18560				
	8Z-ZM1-226-010	GEAR,R					
35	8Z-ZM1-241-010	SPR-T,	PLAY				

# SPEAKER DISASSEMBLY INSTRUCTIONS

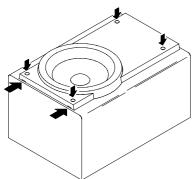
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



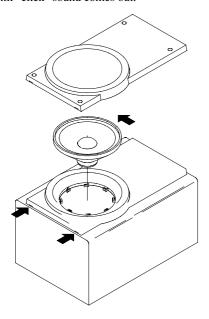
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

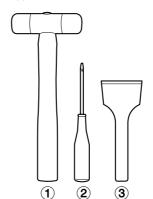


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4

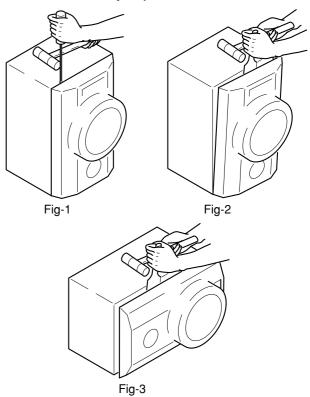


# **TOOLS**

- 1 Plastic head hammer
- ② (⊖) flat head screwdriver
- 3) Cut chisel

# How to Remove the PANEL, FR

- Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.
- Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.
- Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.



# How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

# SPEAKER PARTS LIST SX-NBL11(Y1SL,YSC9,YSC,YSL) / SX-NBL16(YSC9,YSC) SX-NBL17(YLSC9,YLSC) / SX-NAJ11(YUSL)

REF. NO.	PART NO.	KANRI	DESCRIPTION
		NO.	
1	8A-NSB-001-010	PANEL	,FR
2	8A-NSB-014-010	GRILL	E,FRAME ASSY R<16YSC>
2	8A-NSB-003-010	GRILL	E,FRAME ASSY <except 16ysc=""></except>
3	8Z-NSL-601-110	SPKR,	W120 <ysc9></ysc9>
3	8Z-NSL-603-010	SPKR,	W 120 <ysc9></ysc9>
3	8A-NSL-602-010	SPKR,	120 <ylsc9,ylsc></ylsc9,ylsc>
3	8A-NSL-606-010	SPKR,	W120<11YSC,16YSC,YSL,YUSL,Y1SL>
4	87-NS7-611-010	CORD,	SPKR

# ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	Kanri No.	DESCRIPTION	
1	8A-NFZ-906-110	IB,E	EZ(9L)M -BL14<14EZ	>
1	8A-NFZ-916-010	IB,E	EZ(9L)M -BL16(RDS)	<16EZ>
1	8A-NFZ-905-010	IB, N	(E)M -BL14<14K>	
1	8A-NFZ-902-010	IB,I	LH(ESP)M -BL14 <ha></ha>	
1	8A-NFZ-923-010	IB,U	J(ESF)M -AJ14 <u></u>	
2	8Z-NF9-701-210	RC I	JNIT, ZAS02	
3	87-043-115-010		FEEDER FM <hs,ha,u< th=""><th>&gt;</th></hs,ha,u<>	>
3	87-A90-118-010		WIRE FM (Z)<14K,1	
4	87-006-225-010		LOOP ANT NC2	,

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